

## APPENDIX A GLOSSARY OF TERMS

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Acute toxicity: Any toxic effect that is produced within a short period of time, generally 96 hours or less. Although the effect most frequently considered is mortality, the end result of an acute effect could be any harmful biological effect.

Aquifer: The underground layer of rock or soil in which groundwater resides. Aquifers are replenished or recharged by surface water percolating through soil. Wells are drilled into aquifers to extract water for human use.

Beneficial Uses: A term used in various regulations and plans related to surface waters, beneficial uses may include activities such as swimming, fishing, domestic water supply, wildlife habitat and other functions that utilize water as a primary medium.

Best Management Practices (BMP): A method, activity, maintenance procedure, or other management practice for reducing the amount of pollution entering a water body. The term originated from the rules and regulations developed pursuant to Section 208 of the Federal Clean Water Act (40 CFR 130). The term originated with the rules and regulations developed pursuant to Section 208 of the Federal Clean Water Act (40 CFR, Part 130).

Biochemical Oxygen Demand (BOD): The quantity of oxygen-demanding materials present in a sample as measured by a specific test. A major objective of wastewater treatment is to reduce biochemical oxygen demand so that the oxygen content of the water body will not be significantly reduced. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

California Environmental Quality Act (CEQA): A law passed by the California Legislature in 1970 requiring agencies at all levels in California (state, regional and local) to consider the environmental implications of their programs/projects. CEQA often requires the preparation of Environmental Impact Reports (EIRs) for all projects/programs with potential significant impacts on the environment.

Catch Basin: A curb inlet or other inlet to collect and convey storm water to storm drains, pipes or drainage channels.

Check Dam: A small dam designed to retard the flow of water and sediment in a channel, used especially for controlling soil erosion.

Chemical Oxygen Demand (COD): The quantity of oxygen-demanding materials present in a sample as measured by a specific test. The COD test is used to measure the concentration of a waste of unknown chemical composition.

Coliform Bacteria: A type of bacteria which includes many species. Fecal coliform bacteria are those coliform bacteria which are found in the intestinal tracts of warm-blooded animals. The presence of high numbers of fecal coliform bacteria in a water body can indicate the release of untreated wastewater, and/or the presence of animals, and may indicate the presence of pathogens.

Culvert: A drain, usually a concrete or metal pipe, crossing under a road or an embankment.

Detention: The process of collecting and holding back storm water for later release to receiving waters.

Dissolved Oxygen: Oxygen that is present (dissolved) in water and therefore available for fish and other aquatic animals to use. If the amount of dissolved oxygen in the water is too low, then aquatic animals may die. Wastewater and naturally occurring organic matter contain oxygen-demanding substances that consume dissolved oxygen.

EIR: Environmental Impact Report, a document produced a local or state agency in California that discusses the likely significant impacts of a proposal, methods to lessen the impact, and alternatives to the proposal. EIRs are required by the California Environmental Quality Act (CEQA).

EIS: Environmental Impact Statement, a document produced by a federal agency that discusses the likely significant impacts of a proposal, methods to lessen the impacts, and alternatives to the proposal. An EIS is required by the National Environmental Policy Act (NEPA).

Erosion: Wearing away of rock or soil by the gradual detachment of soil or rock fragments by water, wind, ice, and other mechanical and chemical forces.

Fauna: A collective term for the animal life in an ecosystem.

Fecal Coliform: (see Coliform Bacteria).

Flora: A collective term for the plant life in an ecosystem.

Groundwater: Underground water supplies, also called aquifers. Aquifers are created by rain which soaks into the ground and flows down until it is collected at a point where the ground is not permeable. Groundwater then usually flows laterally toward a river or lake or the ocean. Wells tap the groundwater for human use.

Habitat: The specific area or environment in which a particular type of plant or animal lives. An organism's habitat must provide all of the basic requirements for life and should be free of harmful contaminants.

Herbicide: A substance used to destroy or inhibit growth of vegetation.

Impervious: A surface that cannot be easily penetrated, for instance, rain does not cannot easily penetrate asphalt or concrete surfaces.

Insecticide: A substance, usually a chemical, that is used to kill insects.

Land Use: The way land is developed and used in terms of the types of activities allowed (agriculture, residences, industries, etc.) and the size of buildings and structures permitted. Certain types of pollution problems are often associated with particular land use practices, such as sedimentation from construction activities.

Loading: The total amount of material entering a system from all sources.

Metals: Metals are elements found in rocks and minerals that are naturally released to the environment by erosion, as well as generated by human activities. Certain metals, such as mercury, lead, nickel, zinc, and cadmium, are of environmental concern because they are released to the environment in excessive amounts by human activity. They are generally toxic to life at certain concentrations. Since metals are elements, they do not break down in the environment over time and can be incorporated into plant and animal tissue.

Monitor: To systematically and repeatedly measure conditions in order to track changes. For example, dissolved oxygen in a bay might be monitored over a period of several years in order to identify any trends in its concentration.

National Environmental Policy Act (NEPA): A federal law passed in 1970 requiring that federal agencies consider the environmental implications of their programs/projects. NEPA regulations often require the preparation of an Environmental Impact Statement (EIS) for all projects/programs with potentially significant impacts on the environment.

National Pollutant Discharge Elimination System (NPDES): NPDES is a part of the Federal Clean Water Act, which requires point source dischargers to obtain permits. These permits are referred to as NPDES permits, and are administered by the California Water Quality Control Board.

Non-point Source Pollution: Pollution that enters water from dispersed and uncontrolled sources (such as surface runoff) rather than through pipes. Non-point sources (e.g., forest practices, agricultural practices, on-site sewage disposal, and recreational boats) may contribute pathogens, suspended solids, and toxicants. While individual sources may seem insignificant, the cumulative effects of non-point source pollution can be significant.

Non-point Sources (NPS): Diffuse sources from which contaminants originate to accumulate in surface or ground water. Generally, individual sites are insignificant, but can add to a cumulative problem with serious health or environmental consequences.

Nutrients: Essential chemicals needed by plants or animals for growth. If other physical and chemical conditions are optimal, excessive amounts of nutrients can lead to degradation of water quality by promoting excessive growth, accumulation, and subsequent decay of plants, especially algae. Some nutrients can be toxic to animals at high concentrations.

Pathogen: An agent such as a virus, bacterium, or fungus that can cause diseases in humans. Pathogens can be present in municipal, industrial, and non-point source discharges to the Sound.

Permeable Surfaces: Surfaces, such as dirt, that allow some percolation or infiltration of water into the ground and ultimately the groundwater system. This is in contrast to impermeable surfaces, such as concrete, that allows water to run off without any infiltration.

Pesticide: A general term to describe chemical substances used to destroy or control organisms. Pesticides include herbicides, insecticides, algicides, fungicides, and others. Many of these substances are manufactured and are not naturally found in the environment. Others, such as pyrethrum, are natural toxins which are extracted from plants and animals.

pH: The degree of alkalinity or acidity of a solution. A pH of 7.0 indicates neutral water while a pH of 5.5 is acid. A reading of 8.5 is alkaline or basic. The pH of water influences many of the types of chemical reactions that will occur in it. For instance, a slight decrease in pH may greatly increase the toxicity of substances such as cyanides, sulfides, and most metals. A slight increase may greatly increase the toxicity of pollutants such as ammonia.

Point Sources: A source of pollutants from a single point of conveyance such as a pipe. For example, the discharge pipe from a sewage treatment plant or a factory is a point source.

Pollutant: A contaminant that adversely alters the physical, chemical, or biological properties of the environment. The term includes pathogens, toxic metals, carcinogens, oxygen-demanding materials, and all other harmful substances. With reference to non-point



sources, the term is sometimes used to apply to contaminants released in low concentrations from many activities which collectively degrade water quality. As defined in the Federal Clean Water Act, pollutant means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water.

Riparian: Pertaining to the banks of streams, lakes, or tidewater.

Sediment: Material suspended in or settling to the bottom of a liquid, such as the sand and mud that make up much of the shorelines and bottom of the ocean. Sediment input to lakes and rivers can come from natural sources, such as erosion of soils and weathering of rock; or anthropogenic sources, such as forest or agricultural practices, or construction activities. Certain contaminants tend to collect on and adhere to sediment particles.

Siltation: The process by which a river, lake, or other water body becomes clogged with sediment. Silt can clog gravel beds and prevent successful salmon spawning.

Storm Drain System: A system of gutters, pipes, channels or ditches used to collect and carry storm water from surrounding lands to streams, lakes, or the Pacific Ocean.

Storm Water: Water that is generated by rainfall and is often routed into drain systems in order to prevent flooding.

Suspended Solids: Organic or inorganic particles that are suspended in and carried by the water. The term includes sand, mud, and clay particles as well as solids in wastewater.

Swale: A broad, shallow, vegetated channel. A swale is essentially a vegetated drainage ditch that has been engineered to collect and transport storm water in a way that allows the vegetation to filter sediments and pollutants.

Total Suspended Solids (TSS): The weight of particles that are suspended in water. Suspended solids in water reduce light penetration in the water column, can clog the gills of

fish and invertebrates, and are often associated with toxic contaminants because organics and metals tend to bind to particles.

Toxic: Poisonous, carcinogenic, or otherwise directly harmful to life.

Tributary: A stream that flows into another.

Turbidity: A measure of the amount of material suspended in the water. Increasing the turbidity of the water decreases the amount of light that penetrates the water column. High levels of turbidity are harmful to aquatic life.

Urban Runoff: A substance, such as rain, that runs off of surfaces in a watershed in excess of the amount absorbed by the surfaces (usually the ground). Urban runoff can contain sediments and contaminants (non-point source pollution) that can add to water quality degradation in the watershed. Increases in impervious surface usually result in increased urban runoff.

Volatile: A substance that can be readily vaporized at a relatively low temperature.

Watershed: The geographic region from which water drains into a particular river or body of water. A watershed includes hills, lowlands, and the body of water into which the land drains. Watershed boundaries are defined by the ridges separating watersheds.

Wetlands: Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. Wetlands have one or more of the following three attributes: (1) at least periodically, the land supports predominantly aquatic plants (hydrophytes); (2) the supporting ground material (substrate) is predominantly undrained, wet (hydric) soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing seasons each year.

## APPENDIX B

### NINETEEN-STEP PROCESS USED TO DEVELOP THE SAR-DAMP

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#### Step 1 - Engage The Right People

This step consisted of identifying key individuals who will contribute to the planning process that leads to the DAMPs and the SWDMPs. Participant selection has been based upon peoples' knowledge of the local storm water system, knowledge of local environmental conditions and issues, and understanding of local government agency programs and concerns.

#### Step 2 - Educate/Inform The Decision Makers

This step involved keeping the above-mentioned participants and certain other decision and policy making agency personnel educated and informed with respect to the process of developing the DAMPs and planning the SWMPs, as well as routinely updating the appropriate regulatory agency personnel with regard to program status.

#### Step 3 - Define Local Water Quality Problems and Concerns

This step consisted of defining known storm water quality problems within each of the three major study areas (i.e., river basins) in practical (i.e., human/societal) terms, quantitatively and/or qualitatively. This involved reviewing available information concerning local surface water quality and describing these conditions and concerns to the people who will develop the DAMPs.

#### Step 4 - Establish Priorities

This step involved prioritizing the water quality problems/pollutants defined in Step 3. The following questions were addressed: What problems/pollutants should we try to control now?; What level of achievement should we seek for each?. Where there was not sufficient information to deal with such matters in specific terms, a qualitative prioritization was developed that reflected the decision makers' priorities re: pollutants and problems.



#### Step 5 - Establish Objectives that Reflect the Priorities

This step involved considering a broad spectrum of issues (e.g., water quality concerns, but also many other issues) that must be taken into account when developing the broad-reaching and costly public programs and implementation plans. The objectives were stated in terms that are clear enough to guide decision-making and planning processes. They reflect legal, political, institutional, fiscal, and environmental attitudes and priorities.

#### Step 6 - Translate The Objectives Into Factors To Be Considered

After broad-scale objectives were established, the more specific factors that reflect specific areas of concern were defined. This step consisted of defining the factors the decision-makers used to screen through various candidate BMPs and to selecting those which appear to be the most practical ones to be included in the DAMPs and to implement during the SWMPs.

#### Step 7 - Prioritize These Factors to Reflect Local Conditions

The BMP evaluation factors were employed during two different steps. A screening process (considering some of the most important factors) has been used to sort through a broad spectrum of BMPs (which have been considered at other locations). Those which would have little or not benefit in Riverside County were eliminated from further consideration. Other evaluation factors will be considered (in Step 10) and used to designate a practical set of BMPs which will be implemented together in the resultant DAMPs.

#### Step 8 - Define "Practicable"

This step involved defining the bounds of the storm water management program the agencies are capable of putting into practice both practically and financially. This "redefinition" of practicable is necessary due to the regulatory requirement that the BMPs be implemented to the maximum extent practicable (MEP). The BMPs that are considered to be practicable include those which best satisfy the objectives and factors established in Steps 5 and 7.

#### Step 9 - Nominate Candidate BMPs

This step began with a comprehensive review of technical literature and stormwater control programs developed for other areas to develop a large inventory of candidates from which to elect. Woodward-Clyde also drew on the experience of its own personnel and interviewed technical and managerial personnel from several other state agencies, county agencies, and city public works and planning agencies to draw on experience derived from other stormwater pollution studies and water quality planning programs. This effort yielded a comprehensive list of more than 120 separate control measures. These candidates had originally been directed toward site-specific local conditions, so some would have little or no application in Riverside County. Also, some of these candidates involved practices and/or facilities which are now regarded as ineffective (or at least not sufficiently cost-effective). However, many of the candidates were judged to be well worth considering for use in all or large parts of Riverside County.

#### Step 10 - Sequentially Screen the Candidate BMPs

This step consisted of screening the comprehensive list of BMPs (compiled in Step 9) to yield a smaller, more manageable list. The purpose of this task was to help focus attention on the more promising candidates, by eliminating candidates that were judged to be clearly "not applicable". Most of these were BMPs that had originally been directed toward some very localized physical or institutional situations in other areas. Although these situations may have been relevant to the communities where the BMPs were originally proposed, they do not have known counterparts in Riverside County.

#### Step 11- Evaluate (Score) the Candidate BMPs By Filling In Matrix

The screened BMPs were evaluated by the permittees in a workshop and were assigned a positive, negative, or neutral scoring symbol to indicate how they rate relative to the evaluation factors developed in Step 7. This scoring process indicated which of the candidate BMPs would be most successful in meeting the adopted factors and which would be least successful. The resulting scores and the professional judgement of the program development team provided the basis for selection of a practical and "practicable" set of BMPs to implement via the SWMPs.

#### Step 12 - Document The Process And Results

Woodward-Clyde documented the BMP evaluation and selection process to demonstrate compliance with the federal regulations. The results of the selection process was also clearly documented, as well as the assumptions used in scoring the candidate BMPs.

#### Step 13 - Aggregate The Selected BMPs Into Groups That Will Facilitate Their Explanation/Implementation

This step will involve grouping the selected BMPs in terms of how they could best be implemented. Some controls will be implemented primarily through various forms of "education" (i.e., programs which use various forms of education, public information, and/or technology transfer to explain the principals and correct practices of storm water management to the general public or to specially targeted audiences are considered to here to be educational control measures). Some controls will be implemented through new or amended local "regulatory" or public policy directives (and associated inspection, detection, and enforcement activities). Some controls will be implemented through efforts by "public agencies" (i.e., the efforts of planning departments, public work departments, and/or other public agencies that will conduct inspections, provided maintenance and/or repair services, build new facilities, and perform other public agency functions).

#### Step 14 - Establish Timing For The Various Implementation Phases for Each BMP Element And/Or Each Group Of BMPs

This step will establish the proper timing for implementation of the various aspects of the SWMPs over the remainder of the permit compliance period. It will be necessary to plan each phase carefully to consider the opportunities and constraints in each basin and in each permittee's respective jurisdiction. The planning will be followed by preparation for either pilot-scale or full-scale BMP implementation. Implementation of each BMP will include a strategic plan for collecting information to demonstrate its function and general performance (different methods of "data collection" and reporting will be used for different BMPs). Steps, 14, 15, and 16 are interdependent and present the "when", "who" and "how", respectively, for the implementation of the program. This is determined in the individual management plans.

#### Step 15 - Establish Permittees' Roles and Responsibilities

This step will consist of beginning the process of determining appropriate roles and responsibilities for the parties who will implement the various tasks prescribed in the DAMPs. The specific roles and responsibilities for each permittee will have to be worked out over time. Step 15 will consist of making a first pass through the subject to indicate the program development team's views of the appropriate roles and responsibilities for each permittee.

#### Step 16 - Describe How The Above Will Be Implemented

This step will consist of establishing clearly-defined mileposts within the recommended DAMPs and developing a schedule to guide their implementation via the SWMPs. This will involve describing the sequence and timing of the various planning efforts which Riverside County will take as they develop their respective co-permittee control programs.

#### Step 17 - Allocate Annual Budget Amounts For The Selected BMPs

This task will consider the cost and the effectiveness of the recommended Riverside County DAMP. Water quality regulatory agencies (i.e., USEPA/Region 9, USEPA/Headquarters, SWRCB, RWQCBs, etc.) have not established numerical regulations, standards, objectives, stipulations, or performance specifications which can be used as target levels to guide the process of developing and assessing the effectiveness of the BMPs and other efforts that will constitute the SWMPs. This situation presents difficulties, in that the project team has been asked to propose a solution to a problem that has not been fully described, to implement that solution to the "maximum extent practicable," to evaluate the effectiveness of that solution in terms of how well it would solve the problem, and to estimate what the solution would cost. To further complicate matters, the costs and effectiveness of most practical urban storm water BMPs are not well documented, and the specific locations of application cannot be fully defined at this early stage of planning.

The approach which will be used in Step 17 as follows:

- Define the specific BMPs which the team has judged to be most appropriate to include in the DAMPs and implement via the corresponding SWMPs.
- Develop first-order estimates of the costs associated with implementing this program at reasonable levels of intensity.
- Perform a realistic budget allocation which will assign appropriate levels of funding to support the BMPs which comprise the program.
- Make first-order estimates of the programs' probable effectiveness in controlling the most important types of pollutants (i.e., heavy metals, pesticides and herbicides, oil and grease, and bacteria).
- Assess the implications of adopting alternative programs in lieu of the recommended program, expressed in terms of different costs and different levels of effectiveness.

#### Step 18 - Review Existing Programs and Adjust the Assigned Dollars to Reflect the Difference Between "New" Budget Increments and "Old" Budget Items

This step will consist of reviewing both the costs established in Step 17 for "new" BMPs and the costs of existing programs which have been incorporated into the "new" program.

#### Step 19 - Decide Who Will Pay and From What Funding Sources

This step will consist of efforts to determine how each component of the storm water management program will be funded. This may be determined in part by the establishment of roles and responsibilities in Step 15, including the agency/department responsible for funding. In some cases, it may be necessary to develop separate program funding mechanisms, specifically for the SWMPs.

**APPENDIX C**  
**PUBLIC COMMENTS**

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The following comments were received at the public education meeting on the DAMP for Riverside County held January 6, 1993.



MINUTES  
DAMP Public Hearing  
1-6-93

SLIDE SHOW

SPEAKERS:

1. HARLEY KNOX - VALLEY GROUP

- Handed out letter
- Read letter
- Revise DAMP to include "Key Conceptual elements" with respect to uniformity with San Bernardino and Orange Counties.
- Prioritization strategy needed.
- Small Scale "distributed" structural controls not as effective or economical as regional controls.
- Recommendations see letter

Summary

- Valley group is very interested in NPDES Program (requests inclusion on mailing lists)
- Supports non-structural BMP
- Do not support small scale site-based controls
- supports identifying problem areas based on monitoring

2. James Marple CRWM  
(Citizens for Responsible Watershed Management)

- Advocates on-site detention
- Phoenix currently requires 100% detention of 100 yr. flow if this was instituted we would not have these problems eg. slides showing debris in drainage ditches and channels.
- Saving 1 gallon of rainwater saves 3 gallons of imported water "better water for crops."
- Fresno has an effective program to capture water.
- NW Chicago employs on-site detention programs - very successful.

Why do we spend money to line channels to remove H2O as quickly as possible?

NPDES should be considered as way to "Protect water quality vs just a way to comply with Fed Regulations

So. CALifornia engineers claim that natural lined flood control facilities designed for "back east" not real world for Southern California but in fact it is being done in Arizona, Northern California and elsewhere in Southern California.

Why can't it be done here?

Flood Control should require that development sites should not have any pollutant run-off.

This approach was used in proposal for Santa Rosa project why can't it be required elsewhere.

Should not just focus on cost of large scale improvements but instead should realize what small controls save in costs and provide in water quality benefits

F.C. & WCD should lead effort in Water Conservation not just Flood Control efforts.

Board of Supervisors should re examine the role of F.C.

3. Bob Wheeler RCD

Education Component

- Agrees with Regional approach to watershed management.
- Sec. 6. of DAMP on Public Education should not establish a sub committee made up of co-permittee engineers to be lead or chair of Public Education, engineers are not the correct group to handle Public Education.

Flood Control is appropriate for Eng. work but not appropriate for Public Education

Recommend new group to lead Public Education.

Group should have experience in water/soil conservation and public contact.

RCD fits this need

Organization of RCD's being formed in Riv. Co., SB Co. and others.

- Acts as clearing house for information
- Processes grant applications
- Regional Watershed Planning experience

So. Cal Coalition of RCD's should be agency to provide Public Education, funded by BA district, and Co-permittees.

RCD has a great amount of experience in erosion control and works closely with SCS.

4. Phil Walling BIA

- Concerned that DAMP proposes far stricter requirements than State Const. permits.
- Jason: DAMP will reference the State Permit & will not go beyond.
- Model ord. protects Municipalities outside of Ind & Const. Permitting.

Requested involvement in further mtgs on new development

5. Lawrence Carlson USMC

Natural Resource Mgr. for Camp Pendleton.

Camp has 4 groundwater basins and Santa Margarita River supplies 70% of all groundwater for base.

DAMP mentions Estuary but mentions nothing about Santa Margarita upstream

Concern/request that DAMP consider other beneficial uses i.e. drinking water

Bob Wheeler

Santa Margarita Watershed Planning Mtg.  
Feb. 4 meeting Walt Abraham Ctr. 9:30 a.m.

Meeting adjourned 10:50

# The Valley Group

WESTERN VALLEYS GROUP OF RIVERSIDE COUNTY INCORPORATED

## OPPORTUNITIES FOR IMPROVEMENT OF THE RIVERSIDE COUNTY DAMP

The Drainage Area Management Plan (DAMP) for Riverside County is one of several being prepared in response to National Pollutant Discharge Elimination System (NPDES) Permits issued by the Santa Ana Regional Water Quality Control Board (SARWQCB). Others are being prepared by Orange County and San Bernardino County. The Orange County DAMP is the most advanced in terms of processing through the SARWQCB, having been submitted on December 13, 1991. By letter to Orange County dated March 31, 1992, the SARWQCB commented:

"We find this proposed plan to contain the key conceptual elements that constitute a thorough and comprehensive NPDES stormwater pollution control program."

In its letter the SARWQCB offered recommendations for improving the Orange County DAMP, and indicated that the Board staff believes that the recommendations should be implemented in a uniform manner by all co-permittees.

All of the NPDES Permits issued by the SARWQCB contain essentially identical language describing the preparation of DAMPs. This identical language and the idea of uniform implementation contained in the Orange County letter reflect the Board's interest in achieving uniformity among the DAMPs within its jurisdiction, to the extent this is practical.

The Riverside County DAMP dated November 9, 1992 should be revised to incorporate the "key conceptual elements" contained in the Orange County DAMP, for the sake of uniformity and to obtain for Riverside County the benefits of the improved approach.

### PRESIDENT

Joseph J. Kuebler  
Temeaculo/Perris

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Beaumont

Matt Webb  
Moreno Valley

Jim Wells  
Moreno Valley

Robert Wolf  
Moreno Valley

### MEMBERS EMERITUS

John Barbee  
Perris

Al Sykes  
Moreno Valley

This approach incorporates concepts which reflect the drainage management experience of Orange County, Riverside County Flood Control and Water Conservation District (RCFC&WCD), and other Southern California flood control and drainage agencies.

### PROVEN CONCEPTS

These concepts work together to accomplish maximum beneficial impact on the most serious water quality problems with the minimum investment of land, financial, and operational resources, both public and private. They evolved out of long experience in Southern California flood water management, utilizing the principles of hydrologic efficiency, watershed planning, economy of scale, prioritization, utilization of existing facilities, verification of design through experience, and equitable distribution of costs.

Application of these concepts to the development of DAMPs has achieved good results in Orange County and in the Lake Mathews and Moreno Valley areas of Riverside County.

These concepts include:

- Focus on known problems prioritized through monitoring;
- Address known problems on a watershed basis;
- Develop master plans for priority watersheds, locating and designing structural BMPs for maximum hydrologic efficiency;
- Maximize utilization of available resources: right of way, facilities, and operational staffing;
- Retrofit existing facilities where needed and practical;
- Verify structural BMP designs by an evaluation program; and
- Incorporate equitable cost distribution.

These concepts reflect the "top-down" approach familiar to drainage managers, wherein limited resources are conserved by focusing on the most serious problems. Strategically located structures control as large a problem area as possible. A single structure at a hydrologic concentration point can control the same watershed problem as several upstream structures, with savings due to reduced right-of-way requirements, reduced construction of embankments, spillways, and inlets, and reduced operation and maintenance costs.



## PRESENT DAMP

Several of the concepts mentioned above are presently incorporated into the DAMP. For example, the DAMP objectives on page 1-9 include focusing the program on known problems; employing control measures which have been shown to be cost-effective, reliable, and sustainable; and other sound objectives.

However, in its present form the DAMP does not emphasize the watershed planning approach. There is no overall County strategy for watershed prioritization or master planning. Instead, there is provision for mandatory "on-site" structural controls in new developments to promote infiltration, divert flow around pollutant-prone areas, and "treat" storm water.

As a result, not only are the benefits of regional watershed planning not obtained, but there is no recognition of regional systems. Residents of areas such as the Lake Mathews watershed who have paid acreage fees and a benefit assessment in support of regional controls to protect water quality in Lake Mathews will be required to also install and maintain in each tract a system of redundant on-site controls.

## CHARACTERISTICS OF DISTRIBUTED CONTROLS APPROACH

The "distributed controls" approach has serious shortcomings. As envisioned in the DAMP, every development project, regardless of its size or type, would be required to install structural controls and establish a maintenance program with permanent funding.

Distributed controls inherently involve more land, construction, operation, and maintenance than the equivalent hydrologically located regional structure, particularly if the regional structure is a retrofitted existing facility. Ongoing operation and maintenance of a scattered system of small water quality facilities is an unwelcome and expensive burden, whether borne by the RCFC&WCD, the municipalities in Riverside County, or the owners of homes and businesses.

Past experience with assigning drainage maintenance responsibility to homeowner associations or local drainage maintenance districts has been discouraging. The usual outcome is that maintenance responsibility eventually shifts to the flood control district or the municipality, where the cost is borne by the general taxpayer.

Distributed systems are inherently less effective than those resulting from a watershed planning approach. A developer may be held responsible for mitigating the water quality impact of his development, but is not necessarily responsible for existing water quality problems elsewhere in the drainage area, possibly caused by agricultural operations, natural erosion, or existing urbanization. In general, these problems will remain unsolved with the on-site controls approach. On the other hand, under the watershed planning approach, such problems themselves are reasons for assigning high priority to a watershed and developing a focused solution which addresses existing as well as anticipated water quality problems.



On-site systems have an inherent propensity for decay, failure, and abandonment. Experience in Southern California water conservation programs has indicated that facilities which promote the infiltration of polluted storm water are subject to clogging from accumulation of fines and chemical cementation. Thus, the infiltration trenches/basins, porous pavement, French drains, and channel bottoms with porous or perforated pavement described in the DAMP, if implemented, can be expected to fail or undergo the frequent expensive redevelopment that would be necessary to restore infiltration capacity.

The grass swales, filter strips, disconnected roof drains, depression storage areas within parking lots, storm drain inlet filters, oil/water separators, and other minor on-site controls proposed in the DAMP are subject to alteration, removal, and abandonment by future property owners. To prevent this and assure their continued operation and maintenance, the DAMP calls for a re-inspection plan and a self-reporting program. Considering the limited effectiveness of these small on-site facilities, the administrative and regulatory workload necessitated by such a system should be questioned. As indicated above, more economical and more efficient performance can be expected from regional facilities planned, developed, and operated on a watershed basis.

#### FEDERAL AND STATE REQUIREMENTS

The DAMP (Page 5-15) indicates that on-site structural controls are prescribed in the Permits and the Federal regulations. The Permit prescribes structural controls on all new developments. The Federal regulations do not. Rather, the Federal regulations require a comprehensive master plan of source and structural controls to reduce pollutants in drainage systems serving areas of new development, including procedures to assure that existing flood control structures are evaluated to determine the feasibility of retrofitting for pollutant removal. The Federal requirement is satisfied by a watershed planning approach.

The Orange County Permit contains language identical to that in the Riverside County Permit prescribing structural controls for all new developments. The Orange County DAMP prescribes that "routine" structural controls will be employed within all new developments, and that "special" structural controls will be developed where identified through the priority watershed planning process. "Routine" structural controls are defined as:

"economical, practicable, small scale measures which can be feasibly applied at the smallest unit of development, using standard plans. Routine structural BMPs may function either to minimize the introduction of pollutants into the drainage system or to remove pollutants from the drainage system. Routine structural BMPs are intended to address drainage water quality impacts inherent in development, and need not be related to any identified water quality problem."

The Santa Ana Regional Board has reacted favorably to the Orange County DAMP, indicating that the Permit requirement is also satisfied by this approach.

### PROGRAM FINANCING

The suggestions presented herein are designed to minimize overall program costs, to focus program expenditures toward the most urgent water quality problems, and to avoid unnecessary and ineffective expenditures. This having been done, there still remains the question of distribution of cost between segments of the community.

Existing water quality problems are caused by existing development and land use. Master-planned facilities to address existing problems should be paid for by those who benefit. To the extent newly developing areas, with their non-structural BMPs in place, can be reasonably expected to contribute to the watershed problem, these new areas should share in the cost. This can be done by providing a "special" structural BMP or by contributing to the implementation of a structural BMP identified in the watershed master plan through an Area Drainage Plan or other financing mechanism.

### RECOMMENDED ADJUSTMENTS TO THE DAMP

1. Incorporate a County-wide watershed planning approach based on priorities established through evaluation of monitoring data.
2. Investigate existing flood control, debris control, water conservation, recreation, habitat, and greenbelt corridor facilities with a view toward retrofitting to obtain water quality benefits.
3. Model the new developments structural BMP requirements after the provisions in the Orange County DAMP, with "routine" structural BMPs in keeping with the size and type of development, and "special" structural BMPs to address water quality problems identified in the watershed planning process described in Item 1 above.
4. Verify the design of proposed structural BMPs through an evaluation program wherein candidate designs are installed, operated, and monitored for a period of time sufficient to evaluate their pollutant removal effectiveness, maintenance requirements, and cost-effectiveness.
5. Incorporate the concept of "fair-share" financing of structural controls, based on proportionate benefits received.

### CONCLUSION

The RCFC&WCD is to be commended for its effort and thoughtfulness in preparing the DAMP. Its provisions for community education, phased implementation, cooperative implementation among the co-permittees, and others are well presented.

The suggestions presented herein are offered in a spirit of support and cooperation, with a view to obtaining the best possible DAMP by building on the experience of others.

REQUEST TO SPEAK

Public Meeting Concerning A  
Drainage Area Management Program for NPDES Water Quality

9:30AM, Wednesday, January 6, 1993

Name: PHIL WALLINE  
Organization: RIVERSIDE CO. BIA  
Address: 3359 CHICAGO AVE  
Telephone: 784-3300

FOR\_\_ AGAINST ☒

Comments:

DUPLICATES & MAKES MORE  
RESTRICTIONS FOR NEW  
CONSTRUCTION

More Restrictions than the State Permit  
— Very Concerned.

letter  
Done  
1-26

*Riverside County Flood Control & Water Conservation District*

**REQUEST TO SPEAK**

Public Meeting Concerning A  
Drainage Area Management Program for NPDES Water Quality

9:30AM, Wednesday, January 6, 1993

Name: HARLEY KNOX

Organization: VALLEY GROUP

Address: 24560 NANDINA AVE STE 7, MORENO VALLEY 92553

Telephone: 909-656-5555

FOR\_\_ AGAINST\_\_

Comments:

Riverside County Flood Control & Water Conservation District

REQUEST TO SPEAK

Public Meeting Concerning A  
Drainage Area Management Program for NPDES Water Quality

9:30AM, Wednesday, January 6, 1993

Name: James Marple  
Organization: CRWM  
Address: 19210 St. Gallen Way, Murri  
Telephone: 644-9182

FOR\_\_ AGAINST\_\_

Comments:

Small on site Basins  
Save water -  
Change thinking at Flood Control. - reclaim  
water not Rush it out.

To Typing Q



Riverside County Flood Control & Water Conservation District

REQUEST TO SPEAK

Public Meeting Concerning A  
Drainage Area Management Program for NPDES Water Quality

9:30AM, Wednesday, January 6, 1993

Name: Robert Wheeler, Ph.D. Econ.

Organization: Riv. Co. Assoc. of Resource Conservation Dists.

Address: 24280 Washington Ave, Murrieta 92562

Telephone: (909) 677-9182

FOR\_\_ AGAINST\_\_

Comments:

chiefly on education section 6. --- of DAMP

- Agrees with Regional Approach with Counties

Damp Section 6.0 ...

- Sub-committee - Choose own chairman
- Flood may not be good lead of Education program
- Active Agency to follow on the Ed. Programs.
- RCDs ~~to~~ grouping together for watershed planning.

REQUEST TO SPEAK

Public Meeting Concerning A  
Drainage Area Management Program for NPDES Water Quality

9:30AM, Wednesday, January 6, 1993

Name: LAWRENCE E. CARLSON

Organization: US MARINE CORPS

Address: MARINE CORPS BASE, CAMP PENDLETON

Telephone: 619 725-4523

200 m<sup>2</sup>

FOR\_\_ AGAINST\_\_

Comments:

Ask to include the CAMP PENDLETON water supply within the DAMPA. I am sure the San Diego Regional Board will have concern.

as a ben use

# RIVERSIDE COUNTY FLOOD CONTROL DISTRICT

## Sign-in Sheet

Date: Wednesday, January 6, 1993

Subject: Drainage Area Management Program for Water Quality

Name	Agency	Phone
1. <u>Julie Vandemoor</u>	<u>San Teodoro</u>	<u>(714) 434-9080</u>
2. <u>HARLEY KNOX</u>	<u>VALLEY GROUP</u>	<u>909-656-5555</u>
3. <u>John Ristow</u>	<u>Riv. County</u>	<u>909 275-6775</u>
4. <u>DON HEMME</u>	<u>EUMIND</u>	<u>(909) 674-3146</u>
5. <u>Lt David C. Prech</u>	<u>MARCH AFB</u>	<u>(909) 655-4858</u>
6. <u>WANDA CROWTHER</u>	<u>-</u>	<u>909 686 4856</u>
7. <u>William D. Taylor</u>	<u>MWDSC</u>	<u>(714) 372-5149</u>
8. <u>Lynn Beckmann</u>	<u>UCR</u>	<u>714 787-6311</u>
9. <u>Diane Sanchez</u>	<u>Dept. of Water Resources</u>	<u>818 543 4645</u>
10. <u>Shelli Lamb</u>	<u>Riverside forams Rcn</u>	<u>909-683-7691</u>
11. <u>MICHAEL J. MICAL</u>	<u>RIVERSIDE COUNTY</u>	<u>(909) 275-1886</u>
12. <u>Michael HARROD</u>	<u>Riverside Co. Planning</u>	<u>(909) 275-1881</u>
13. <u>Wm. G. Worth</u>	<u>UCR</u>	<u>(909) 787-6304</u>
14. <u>Al Pielm</u>	<u>CITY OF RIVERSIDE</u>	<u>909 351 6115</u>
15. <u>JOHN JOHNSON</u>	<u>CITY OF RIV</u>	<u>(909) 351-6145</u>
16. <u>STEVE BROWN</u>	<u>THE KEITA Companies</u>	<u>(909) 653-0234</u>

# RIVERSIDE COUNTY FLOOD CONTROL DISTRICT

## Sign-in Sheet

Date: Wednesday, January 6, 1993

Subject: Drainage Area Management Program for Water Quality

	<u>Name</u>	<u>Agency</u>	<u>Phone</u>
1.	James Mayple	CRWM	647-9182
2.	PHIL WALING	NASLAND ENGINEERING	784-3300
3.	RICK THOMSEN	CO-DE THOMSEN ENGR	654-4454
4.	TONY RAWAMOOT	Building & Safety	275-2030
5.	STEVE DARDALSKI	BLDG + SAF.	275-2000
6.	GRANT BECKLUND	GARCIA, Cook & B. ALA.	750-2000
7.	MIMI RAYL	Lewis Homes	(909) 946 7547
8.	Dennis Armstrong	City of Temecula	(909) 684-6411
9.	Mubashar Ahmed	Liverside County	909 275-1370
10.	Mrs A. Divine	<sup>PROBATION</sup> Riv. Flood Control	909-387-5701
11.	BOB SHAFER	NASLAND ENG	714-7843300
12.	Parlover Vitale	RWQCB	(909) 782-4920
13.	Mark Adelson	"	(909) 782-3234
14.			
15.			
16.			

# RIVERSIDE COUNTY FLOOD CONTROL DISTRICT

## Sign-in Sheet

Date: Wednesday, January 6, 1993

Subject: Drainage Area Management Program for Water Quality

<u>Name</u>	<u>Agency</u>	<u>Phone</u>
1. <u>BRIAN GUILLOT</u>	<u>CITY OF BANNING</u>	<u>(909) 922-1230</u>
2. <u>Elizabeth Shorey</u>	<u>Albert A. Webb Assoc.</u>	<u>(909) 686-1070</u>
3. <u>Fajal Kabbara</u>	<u>Cal Trans Dist 8</u>	<u>(909) 393-5974</u>
4. <u>TRICIA D THREASHER</u>	<u>UNIV OF CALIF. RIVERSIDE</u>	<u>909/787-3295</u>
5. <u>Bob Wheeler</u>	<u>E-m-A Resource Cons. Dist</u>	<u>(909) 677-9182</u>
6. <u>Mehdi Khailazadeh</u>	<u>CITY OF CORONA</u>	<u>(909) 736-2298</u>
7. <u>BILL WACKENTIN</u>	<u>PAV BIA</u>	<u>(909) 788-5422</u>
8. <u>CAROL FOREST</u>	<u>WOODWARD-CUNEO</u>	<u>(619) 294-9400</u>
9. <u>Jolan Johnson</u>	<u>CLV. Co. AG</u>	<u>(909) 775-1114</u>
10. <u>Robert Meals</u>	<u>RCFC</u>	<u>(909) 275-1229</u>
11. <u>Terry Decker</u>	<u>RCFC</u>	<u>(909) 275-1208</u>
12. _____	_____	_____
13. _____	_____	_____
14. _____	_____	_____
15. _____	_____	_____
16. _____	_____	_____

RIVERSIDE COUNTY FLOOD CONTROL DISTRICT

Sign-in Sheet

Date: Wednesday, January 6, 1993

Subject: Drainage Area Management Program for Water Quality

<u>Name</u>	<u>Agency</u>	<u>Phone</u>
1. <u>GABRIEL ALCAO</u>	<u>CALTRANS DIST.</u>	<u>(909) 383-5992</u>
2. <u>Joe McCann</u>	<u>Riv. County Waste</u>	<u>(909) 275-1370</u>
3. <u>Larry Carlson</u>	<u>CAMP PENDLETON MARINE CORPS BASE</u>	<u>619 725-4523</u>
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____
7. _____	_____	_____
8. _____	_____	_____
9. _____	_____	_____
10. _____	_____	_____
11. _____	_____	_____
12. _____	_____	_____
13. _____	_____	_____
14. _____	_____	_____
15. _____	_____	_____
16. _____	_____	_____



January 26, 1993

Mr. Robert Wheeler, PhD  
Elsinore-Murrieta-Anza  
Resource Conservation District  
24280 Washington Street  
Murrieta, CA 92562

Dear Mr. Wheeler:

Re: Santa Ana NPDES  
Public Meeting

Thank you for your comments during the public meeting on the Santa Ana NPDES Drainage Area Management Plan (DAMP) on January 6, 1993. Your point that the Resource Conservation District (RCD) has experience with public education is well taken. However, to have a member of RCD serve as the Chairman of the NPDES Subcommittee on education would not be appropriate. The Chairman should be from an agency that is a Co-permittee of the NPDES Municipal Permit. That duty will no doubt rest with the Flood Control District, since we have the personnel available.

The value of your expertise with public education will not be overlooked. We feel the RCD can play a major role in this program and hope you will continue with your involvement.

We would like to take this opportunity to invite you to the public meeting on February 16, 1993 at 9:30 a.m. at the Murrieta City Hall on the Santa Margarita DAMP.

On behalf of the Santa Ana NPDES Advisory Committee, I would also like to thank you in advance for you and Shelli Lamb giving a presentation to the Committee at the February 18, 1993 meeting.

Very truly yours,

JASON R. CHRISTIE  
Senior Civil Engineer

JRC:slj  
jcl0126b

January 26, 1993

Mr. Phil Walling  
Riverside County BIA  
3359 Chicago Avenue  
Riverside, CA 92507

Dear Mr. Walling:

Re: Santa Ana DAMP  
Public Meeting

Thank you for attending and speaking at the public meeting for the Santa Ana NPDES Drainage Area Management Plan (DAMP). We appreciate your concerns that there is a potential for increased cost to the development industry.

We endeavor to keep all program cost at a minimum. The NPDES Program is and will be for a while, in a state of flux. The District, Co-permittees and the Regional Water Quality Control Boards do not want to jump into expensive programs. This year Congress will reauthorize the Clean Water Act. The Storm Water NPDES Program in many ways, was based on the program designed in 1972 for waste treatment plants and other point source discharges. We believe our efforts through the State APWA Storm Water Task Force will make this a more reasonable law to "live with". The involvement of the BIA in the task force is encouraged.

Since this program is the result of a Federal law, we must work together to develop it as best we can to avoid unreasonable burdens on any party. We hope you or another BIA representative will continue to attend our meetings. Unfortunately, since Rod Hanway left the BIA, your representation has been lacking. Detailed comments or proposals on the DAMP would be most helpful in formulating programs to best meet everyone's concerns and still comply with the law. Remember, the DAMP is a plan that can be changed at almost any time.

If you have any questions or wish to discuss the DAMP, please call me at 275-1273.

Very truly yours,

JASON R. CHRISTIE  
Senior Civil Engineer

JRC:slj  
jcl0126d

APPENDIX D  
DESCRIPTION OF LEGAL AUTHORITY<sup>1</sup>  
AND MODEL ORDINANCE

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I. INTRODUCTION

- A. Purpose The purpose of this appendix of the Drainage Area Management Plan (DAMP) is to indirectly meet the Environmental Protection Agency's (EPA) legal authority requirements through our early permit process. The permit requires that the co-permittees provide: "A description of the legal authorities for implementing the programs, and a proposed time schedule for obtaining such legal authorities, if necessary." To that end, this section addresses the degree to which the co-permittees' existing ordinances already utilize California constitutional and statutory grants of authority to address the required elements of the DAMP, and whether the existing ordinances should be amended, or new ordinances adopted to remedy any shortfalls in the existing ordinances.

With a few minor exceptions, present constitutional and statutory authority of each of the co-permittees is sufficient to address all elements of the DAMP. Both the police power and the "home rule" power enunciated in the California constitution confer broad authority on local government to regulate public health, safety and welfare. In addition, a number of existing statutes provide authority to address more narrow issues, such as leaking underground storage tanks and the use of hazardous materials.

To a limited degree, local authority may be restricted by state and federal preemption. For example, co-permittees do not have the authority to regulate state and federal facilities. In addition, certain subjects, such as hazardous waste facility regulation, pesticides regulation, PCB regulation are also preempted by either state or federal law; however, these create only minor gaps in the overall local regulatory scheme.

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<sup>1</sup> This section was prepared by Latham & Watkins, Attorneys at Law.

Our review of existing local ordinances indicates that generally, these ordinances were enacted to address concerns such as zoning, flood control, nuisance litter control or blockage of storm drains, and were not enacted for the purposes of regulating storm water quality. This appears to be particularly true with respect to inspections and monitoring provisions. As a result, the various ordinances tend to differ in scope and focus from the National Pollutant Discharge Elimination System (NPDES) program. We have provided a model ordinance that would address all NPDES requirements for storm water discharges.

The DAMP includes implementation provisions for the review of existing ordinances by the responsible city attorneys and county counsel to determine whether focused amendments to those ordinances and/or adoption of a new ordinance would be appropriate to close the remaining gaps in the current local regulatory scheme. In order to simplify the task and to create uniformity in ordinances, the co-permittees should each adopt a model ordinance, which is included in the back of this DAMP. We expect that as the model ordinance is reviewed by the staff and legal counsel of each co-permittee that changes will be made. However, the key points for authority and issues addressed in the ordinance should not be limited or modified. A timetable for co-permittees to adopt such an ordinance is detailed in the following paragraphs.

#### B. TIMETABLE FOR ADOPTION OF ADEQUATE LEGAL AUTHORITY

1. The changes in ordinances must be reported to the Riverside County Flood Control and Water Conservation District (RFC&WCD), and the RFC&WCD, as lead permittee, should compile the reports as part of submission of the 1993 annual NPDES permit report.
2. Riverside County. In late 1993, Riverside County intends either to modify the ordinances to correct any inadequacies or cooperate with co-permittees in developing a comprehensive NPDES Ordinance which meets NPDES standards for storm water pollution control.
3. Other Co-permittees. As of the preparation of the legal authorities section of the DAMP, the other co-permittees have not proposed a formal schedule for

the improvement of local ordinances. The following proposal allows approximately one year for all public agencies in Riverside County to evaluate and adopt necessary provisions, submit reports to the RFC&WCD and for the RFC&WCD to compile and summarize these reports as part of its annual report.

4. Schedule.

- a. Review Proposed Language and Make Modifications. Proposed language should be reviewed by city and county staffs, attorneys and consultants if necessary. This task should be completed by the end of June, 1993.
- b. Adopt Proposed Language. The co-permittees will need to present all proposed modifications at public meetings. The language of the proposals may need to be modified based upon public comments. This task should be completed by the end of March, 1994. As changes are made, they should be reported concurrently to the RFC&WCD.
- c. Adopt Ordinance. Each co-permittee will either adopt a model ordinance or draft specifically tailored amendment to existing ordinances. This task should be completed by the end of December 1994.
- d. Annual Reporting. The changes to the ordinances must be reported to the RFC&WCD and the RFC&WCD should compile the reports as part of submission of the annual NPDES Permit reports. The RFC&WCD should obtain this information as the new language is adopted and, therefore, this task also should be completed by August of each remaining permit year.

## C. REGULATORY REVIEW

The following review of the Clean Water Act and EPA regulations is included in this Introduction for two reasons. First, the permit was written in response to the draft NPDES regulations promulgated on December 7, 1988. As such, whenever there is doubt or a question about the intention of or meaning of a part of the permit the regulations are consulted. Second, the permit will expire in July of 1995. When the new permit is written, the EPA regulations will be mirrored in the new permit.

1. Clean Water Act. Section 402(p) of the Clean Water Act, 33 U.S.C. § 1342(p), as amended, provides for the issuance of permits for the discharge of municipal storm water from municipal storm drains. Such permits shall:
  - a. include a requirement to effectively prohibit non-stormwater discharges into the storm sewers; and
  - b. require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the [EPA] Administrator or the State determines appropriate for the control of such pollutants.

33 U.S.C. § 1342(p)(3)(ii), (iii).
2. EPA Regulations. The EPA promulgated NPDES Regulations for storm water discharges under the Clean Water Act (EPA Regulations). The EPA Regulations, among other things, require co-permittees to include a demonstration that they have adequate legal authority to implement a program to control the discharge of storm water from municipal storm drains. To that end, the co-permittees' NPDES permit application must include the following:



a. "A demonstration that the applicant can operate pursuant to legal authority established by statute, ordinance or series of contracts which authorizes or enables the applicant at a minimum to:

- (1) Control through ordinance, permit, contract, order or similar means, the contribution of pollutants to the municipal storm sewer by storm water discharges associated with industrial activity and the quality of storm water discharged from sites of industrial activity;
- (2) Prohibit through ordinance, order or similar means, illicit discharges to the municipal separate storm sewer;<sup>2</sup>
- (3) Control through ordinance, order or similar means the discharge to a municipal separate storm sewer of spills, dumping or disposal of materials other than storm water;
- (4) Control through interagency agreements among co-permittees the contribution of pollutants from one portion of the municipal system to another portion of the municipal system;
- (5) Require compliance with conditions in ordinances, permits, contracts or orders; and
- (6) Carry out all inspection, surveillance and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including the prohibition on illicit discharges to the municipal separate storm sewer."

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<sup>2</sup> "Illicit discharges" includes, but is not limited to "used oils." The EPA Regulations provide that "many storm sewers contain illicit discharges of non-storm water and . . . large amounts of wastes, particularly used oils, are improperly disposed in storm sewers. Removal of these discharges presents opportunities for dramatic improvements in the quality of storm water discharges." See 55 Fed. Reg. 47992 (1990).

40 C.F.R. § 122.26(d)(2)(i).

- b. A description of existing legal authority to control discharges to the municipal separate storm sewer system. When existing legal authority is not sufficient to meet the criteria provided in paragraph (d)(2)(i) of this section, the description shall list additional authorities as will be necessary to meet the criteria and shall include a schedule and commitment to seek such additional authority that will be needed to meet the criteria.

40 C.F.R. § 122.26(d)(1)(ii).

The EPA Regulations require only that the applicants identify their authority to carry out and implement anticipated storm water permit obligations, and do not require that this authority be fully utilized to create a complete program at the time of the permit application.

## II. LEGAL AUTHORITY

The co-permittees include one general law county, one charter city (Riverside), 10 general law cities (Canyon Lake, Corona, Lake Elsinore, Norco, Beaumont, Moreno Valley, Perris, San Jacinto, Hemet, Calimesa) and one special district. The legal authority of the co-permittees is derived from three categories of sources:

### A. California Constitution

1. Police Power. Article XI, Section 7 provides that "[a] county or city may make and enforce within its limits all local, police, sanitary, and other ordinances and regulations not in conflict with general laws. See also, People ex rel Deukmejian v. County of Mendocino, 36 Cal.3d 476, 484, 204 Cal.Rptr. 897, 901 (1984); Miller v. Board of Public Works, 195 Cal. 477, 484-85, 234 P. 381, 383 (1925).

All of the territory to be covered by the DAMP is included either within the city limits of one of the cities or the unincorporated area of the County.<sup>3</sup> Consequently, police power exists for the entire area. Except where preempted or otherwise limited as discussed below, the cities and the County have the authority to enact ordinances to address all facets of the DAMP.

2. "Home Rule" Power. Article XI, Section 5 provides an additional source of power for chartered cities. This Section provides that, as to all subjects which are of statewide concern, chartered cities<sup>4</sup> are subservient to and controlled by applicable general state laws; however, as to purely municipal affairs, regulations of a chartered city predominate even where they conflict with general state law. See also, Bishop v. City of San Jose, 1 Cal.3d 56, 61-62, 81 Cal.Rptr. 465, 468 (1969).

B. Statutory Authority. In addition to Constitutional authority, the co-permittees also have broad state statutory authority to implement provisions of the DAMP. The relevant State statutes can be grouped into three principal categories: (1) municipal authorizing statutes; (2) broad environmental programs; and (3) narrower state laws and regulations controlling nuisance or disposal of used oil or prohibiting littering.

1. Municipal Authorizing Statutes. These are those permitting agreements for the joint exercise of powers shared by government entities, or establishing the powers of districts such as the RFC&WCD.

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<sup>3</sup> Although the District's authority is limited to that created by statute, it nevertheless has broad authority to regulate discharges.

<sup>4</sup> As indicated above, Riverside is the only chartered city among the co-permittees involved in preparing the DAMP.

- a. Government Code § 6502. This provision states that public agencies<sup>5</sup> can agree to use any powers that they share in common, under a joint exercise of powers agreement:

If authorized by their legislative or other governing bodies, two or more public agencies by agreement may jointly exercise any power common to the contracting parties, even though one or more of the contracting agencies may be located outside this state.

- b. Government Code § 6503 further provides that "[t]he agreements shall state the purpose of the agreement or the power to be exercised. They shall provide for the method by which the purpose shall be accomplished or the manner in which the power will be exercised."

- c. Water Code Uncodified Act 6642 is enabling legislation for the RFC&WCD. The RFC&WCD may, among other things:

prevent contamination, pollution or otherwise rendering unfit for beneficial use the surface or subsurface water used in the RFC&WCD, and to commence, maintain and defend actions and proceedings to prevent any such interference with the aforesaid waters as may endanger or damage the inhabitants, lands, or use of water in the [D]istrict . . . .

carry on technical and other investigations of all kinds . . . and make analyses, studies and inspections

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<sup>5</sup> "[P]ublic agency' includes, but is not limited to, the federal government or any federal department or agency, this state, another state or any state department or agency, a county, county board of education, county superintendent of schools, city, public corporation, public district, or regional transportation commission of this state or another state." Government Code § 6500.

pertaining to water supply . . . and use of water, both within and without the RFC&WCD . . . and for the purposes the RFC&WCD shall have the right of access through its authorized representatives to all properties within the RFC&WCD.

. . . .

do all acts necessary for the full exercise of all powers vested in the RFC&WCD or any of the officers thereof by this act.

Wat. Uncod. Act 6642 § 9.

- d. This Act also gives the district board of supervisors "the power to make and enforce all needful rules and regulations for the administration and government of the RFC&WCD . . . ."

Wat. Uncod. Act 6642 § 11.

- 2. State Environmental Programs. These are programs which address major environmental subject areas. These general environmental programs provide additional authority and existing structures to implement certain goals of the DAMP, such as the development of general plans, the protection of water quality, the prevention of and response to hazardous materials spills that might reach storm drains, or the regulation of solid and hazardous waste disposal facilities to reduce discharges.

- a. Planning and Zoning Law. Government Code § 65300 et seq. Under the state Planning and Zoning Laws, each city and county must prepare and adopt a comprehensive, long-term general plan for its physical development. The "conservation element" of each general plan must discuss the identification,

conservation, development, and use of natural resources including water resources and may consider issues such as preservation of water quality, flood control, erosion controls, and timing and impact of development activities. The portion of the conservation element addressing water issues must be developed in coordination with all local agencies which deal with water in that community.

The co-permittees could use the authority conferred in them by the Planning and Zoning Laws to include storm water regulations in their respective general plans.

- b. Porter-Cologne Water Quality Control Act. Water Code § 13000 et seq. The Porter-Cologne Water Quality Control Act (the "Porter-Cologne Act") establishes the principal state program for control of water quality. Chapter 5.5 of the Porter-Cologne Act authorizes the state to implement the provisions of the federal Clean Water Act. Generally, the Regional Water Quality Control Boards (RWQCBs) implement and enforce the provisions of the Porter-Cologne Act, subject to policy guidance and review by the State Water Resources Control Board (SWRCB). The SWRCB and RWQCBs are given broad authority to adopt regulations for protection of water quality. For example, RWQCBs are authorized to specify the location and nature of discharges, either through planning level actions or through individual permits:

A RWQCB, in a water quality control plan or in waste discharge requirements, may specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted.

California Water Code § 13243.



The RWQCB and SWRCB also are authorized to enforce the Porter-Cologne Act by issuing, among other things, cease and desist orders, cleanup or abatement orders and administrative civil penalties.<sup>6</sup>

- c. Hazardous Waste Control Act. Health & Safety Code § 25100-25250.25. The Hazardous Waste Control Act ("HWCA") establishes a program or regulations and incentives to control hazardous waste treatment, storage and disposal.

The HWCA provides for the "listing" of hazardous wastes (which include hazardous wastes under the federal Resource Conservation and Recovery Act ("RCRA") and non-RCRA hazardous wastes.) The HWCA also regulates hazardous waste generators, haulers, facilities, disposal and land use. The HWCA is a comprehensive "cradle to grave" program directed toward preventing the release of hazardous substances into the environment.

While only the state is authorized to issue hazardous waste facility permits under the HWCA, local officials are given considerable enforcement authority under the state. Health & Safety Code Section 25180(a) provides that:

[t]he standards in this chapter and regulations adopted by the department to implement this chapter shall be

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<sup>6</sup> In addition, among other things, section 301(a) of the federal Clean Water Act, prohibits the discharge of pollutants into navigable waters of the United States without a NPDES Permit. 33 U.S.C. § 1311(a). Violations of the Clean Water Act are enforceable in federal district court by any person, including cities and counties. Theoretically, a federal citizen suit provision is available, but as a practical matter it is too cumbersome a process for the enforcement of illegal discharges.

enforced by the department or any local health officer or any local public officer as designated by the director.

Given the considerable enforcement authority of local officials under the HWCA, co-permittees could use these provisions to enforce the EPA Regulations and both the Santa Ana and San Diego NPDES Permits.

- d. Hazardous Materials Release Response Plans and Inventory Act ("Business Plan Law"). Health & Safety Code § 25500-25520. The Business Plan Law requires the establishment of business and area plans relating to the handling and release or threatened release of hazardous materials. The Business Plan Law requires a city or county "administering agency". By ordinance or resolution, a city may assume full responsibility for the implementation of this law and if so, it shall have exclusive jurisdiction within the boundaries of the city. Business plans are required to be updated every 2 years, and must include, at minimum, an inventory of all hazardous substances handled by each particular business, emergency response plans and procedures and training in safety procedures for all employees.

The authority given to local governments under the Business Plan Law could be used by co-permittees to implement some of the requirements of the EPA regulations and both the Santa Ana and San Diego NPDES Permits.

- e. Integrated Waste Management Act. Public Resources Code § 40000 et seq. The Integrated Waste Management Act ("IWMA") declares that solid waste regulation is a shared responsibility of the state and local governments. The IWCA requires the state to authorize and order local agencies to

provide adequately for solid waste handling within their respective jurisdictions and in response to regional needs.

The authority given to local governments under the IWCA could be used by co-permittees to implement some of the requirements of the EPA regulations and the Santa Ana and San Diego NPDES Permits.

- f. Permit Requirement for Storm Water Discharge Associated with Industrial Activity. The SWRCB has issued a statewide general permit that will apply to all California industrial discharges requiring a NPDES storm water permit, except discharges from construction activities. A separate statewide permit governing construction activities recently was adopted by the SWRCB. Storm water associated with industrial activity is defined as "the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant." The definition identifies a variety of areas that are covered by the general permit, including storm water discharges from industrial plant yards, material handling sites, shipping and receiving areas, manufacturing buildings, raw material storage areas, and intermediate and finished products. Facilities that are ineligible or that do not apply for coverage under the general permit still may seek coverage under an individual permit.

Both types of state permits may be available to fill the gaps in the co-permittees' legal authority to implement the DAMP resulting from, among other things, state preemption. See IIC, infra. Moreover, certain facilities such as federal facilities and facilities on Indian lands may seek coverage under the EPA's

federal general permit.<sup>7</sup> The EPA general or individual permits also may be used to fill in gaps in co-permittees' legal authority to implement the DAMP resulting from federal preemption. See IIC, infra.

In sum, there is a variety of state general statutes that appears to grant significant local authority to include provisions relating to storm water regulation within each of the co-permittee's existing ordinances; however, as discussed further below, it would be far simpler to utilize general authority granted by the respective city and county charters to adopt a uniform ordinance, based upon the model attached hereto to exclusively and expressly regulate storm water.

3. Other State Law. These include more focused state laws and regulations.

a. Nuisance Laws.

- (1) Cities and counties possess the authority to declare, prohibit and abate public nuisances pursuant to the general police power. Civil Code § 3494. A "nuisance" is defined as

[a]nything which is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or

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<sup>7</sup> The EPA final general stormwater permit is scheduled to be issued later in 1992.

basin, or any public park, square, street, or highway is a nuisance.

Civil Code § 3479.

- (2) A "public nuisance" is a nuisance "which affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon the individuals may be unequal." Civil Code § 4380.
- (3) Cities and counties have the right to abate nuisances existing within their respective boundaries and may abate or enjoin the nuisance and also recover damages. See, e.g., Cal. Code Civ. Proc. § 731.
- (4) The authority to declare and abate nuisances has been applied to water pollution, and the Porter-Cologne Act does not preempt local authority to declare that a nuisance exists or to take action to abate a nuisance. People v. City of Los Angeles 160 Cal.App.2d 494, 502, 325 P.2d 639, 643 (1958) (Porter-Cologne Act expressly reserves the power of any city or county to declare, prohibit or abate nuisances).

The co-permittees conceivably could declare all discharges in violation of the EPA Regulations and/or the Santa Ana and San Diego NPDES Permits to be nuisances; thereby incorporating the substantive requirements of the Federal program and both Permits (but in so doing, the co-permittees still must add adequate inspection authority). Declaring all discharge violations to be nuisances also would invoke the nuisance enforcement provisions. Again, however, an ordinance which

directly prohibits or restricts such discharges would be simpler and uniform for all co-permittees.

b. Littering and Used Oil Disposal Laws.

- (1) Aside from local ordinances which prohibit littering, state law also contains anti-littering provisions. See, e.g., Health & Safety Code §§ 4401, 4476.<sup>8</sup> In addition some of the state anti-littering provisions are directly enforceable by local agencies.<sup>9</sup>

In some instances, state anti-littering provisions may be more extensive than their local counterparts and may be relied upon to expand the scope of the local programs, and thus provide additional legal authority to implement the DAMP.

- (2) The disposal of used oil to storm sewers also is addressed by existing state law.
  - (a) Health & Safety Code § 25250.4 provides that, as a hazardous waste, the disposal of used oil to an unpermitted site is prohibited.

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<sup>8</sup> Section 4401 provides that "[e]very person who places, deposits, or dumps any garbage in or upon the navigable waters of this State, or who places deposits or loads it upon any vessel, with intent that it shall be dumped or deposited in or upon the navigable waters of this State, or at any point in the ocean within twenty miles of any point on the coast line of the State, is guilty of a misdemeanor." Section 4476 prohibits the deposit of sewage or garbage, among other things, in a public street or on other public properties.

<sup>9</sup> See, e.g., Health & Safety Code § 4477, which provides that "[e]very state fish and game warden, police officers of cities, sheriffs and their deputies and other peace officers of the State of California, within their respective jurisdictions, shall enforce the provisions of this article."



- (b) Health & Safety Code § 25250.5 provides that "[d]isposal of used oil by discharge to sewers, drainage systems, surface or groundwaters, watercourses, or marine waters; by incineration or burning as a fuel; or by deposit on land, is prohibited, unless authorized by other provisions of law."
- (3) Consequently, legal authority exists at the local level to implement provisions relating to both littering and used oil disposal.

C. Limitations on Local Authority

1. Preemption of State and Federal facilities. State and federal regulation of state and federal facilities preempts local government regulation of such facilities. While such preemption creates a gap in the local authority to regulation storm water discharges, it nevertheless can be filled by issuing individual NPDES permits to exempt facilities under state and Federal law, or by seeking coverage under the state or Federal general permits. See IIB, *supra*.
2. Preemption of Certain Subjects. The scope of state and federal preemption is an extremely complex and at times an unclear area of the law.

Basically, a local action is preempted by state law if it conflicts with state law. A conflict exists if the regulation "duplicates, contradicts or enters an area fully occupied by general law, either expressly or by legislative implication." Candid Enterprises, Inc. v. Grossmont Union High School RFC&WCD, 39 Cal.3d 878, 885, 218 Cal.Rptr. 303 (1985). In California, areas of express state preemption include regulation of hazardous waste treatment, storage, or disposal facilities,

hazardous materials transportation, pesticides use, and regulation of PCBs.

The limitations on local authority to implement the DAMP should not significantly reduce the effectiveness of the program. Since the scope of state and federal preemption is controlled by the state and federal legislatures, the DAMP will rely upon the issuance of separate NPDES permits or such other state and/or federal authority as may be available, to fill the gaps in local authority.

### III. PRESENT STATUS OF CO-PERMITTEES EXERCISE OF LEGAL AUTHORITY<sup>10</sup>

Local ordinances must carry out the two major substantive requirements of the Federal statute: (1) to "effectively prohibit" non-storm water discharges from entering the municipal separate storm sewer and (2) to reduce the discharge of pollutants through storm water runoff to the maximum extent practicable.

The preamble to the EPA Regulations states that municipalities wishing to rely on existing programs or programs developed for other purposes still must comply with all facets of the EPA Regulations:

Although many land use programs have multiple purposes, including the reduction of pollutants in discharges from municipal separate storm sewer systems, the proposed management programs. . . are intended to address only those controls which can be implemented by the permit applicant or co-applicants. EPA cannot abrogate its responsibilities under the [Clean Water Act] to implement the NPDES permit program by relying on pollution

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<sup>10</sup> Information for this section was obtained by reviewing selected ordinances and portions of codes designated to be relevant and submitted by each co-permittee. There may be additional ordinances or other local legislation which were not included in this review. Moreover, certain requirements of the DAMP can be addressed through other documents, such as additions to the co-permittee general plans. A comprehensive review of such additional measures is beyond the required scope of this permit application.

control programs that are outside the NPDES program. For example, municipal permit management programs may not rely exclusively on erosion or sediment control laws for implementing that portion of management programs that address discharges from construction sites, unless such laws implement NPDES permit program requirements entirely and that such implementation is a part of the permit.

55 Fed. Reg. 48052 (Emphasis added).

Based upon the EPA requirements, then, to the extent that any of the co-permittees has enacted preexisting ordinances, contracts or regulations addressing storm water such provisions must "implement NPDES permit program requirements entirely." Based upon the following review of each co-permittee's existing authority, we believe that while each of the co-permittees has varying degrees of legal authority to implement and enforce the DAMP, none of the existing ordinances "implements NPDES permit program requirements entirely." Consequently, as discussed below, each of the co-permittees should amend its existing ordinances or, preferably, enact a uniform ordinance designed expressly to regulate storm water discharges as set forth in the EPA Regulations and the Santa Ana and San Diego NPDES Permits.

A. County of Riverside. Riverside County (the "County") does not appear to have any legal authority directly addressing stormwater discharge to municipal separate storm sewers. Several of its ordinances however, do provide some legal authority to implement the DAMP:

1. Control through ordinance, permit, contract, order or similar means, the contribution of pollutants to the municipal storm sewer by stormwater discharges associated with industrial activity and the quality of stormwater discharged from sites of industrial activity.

The County has a variety of ordinances which help to satisfy this requirement. For example, the County's Zoning Ordinances provide that facilities in industrial and manufacturing zones must submit plans describing treatment

and disposal of sewage and industrial and toxic wastes, and these plans must comply with SWRCB regulations. In addition, mining facilities must comply with SWRCB regulations.

The Uniform Building Code regulates collection and disposal of rubbish and debris during construction activities and other ordinances regulate the removal of rubbish and prohibits the accumulation of rubbish which is injurious to the neighboring property or to the health or welfare of the residents in the vicinity.

Development ordinances set forth requirements for sediment control plans, including practices such as temporary control measures and landscaping requirements.

Hazardous waste regulations govern establishments where hazardous waste is generated, stored, handled, disposed of, treated, or recycled. (The ordinance is enforced through the County Health Department and, according to the County, is utilized to ensure that hazardous wastes are not permitted to enter into storm water discharges from industrial activities.)

Subdivision ordinances prohibit the use of streets for flood control and drainage purposes if such discharges are not in the interest of public health, safety and welfare.

2. Prohibit through ordinance, order or similar means illicit discharges to the municipal separate storm sewer.

Although the County's ordinances do not provide for a complete prohibition of such illicit discharges, flood hazard ordinances provide that sanitary sewers and septic system discharges are to remain separate and unconnected from storm

water system; a subdivision ordinance prohibits the use of streets for flood control and drainage purposes; hazardous waste regulations ensure that hazardous wastes are not illegally discharged into the storm water system; and other ordinances prohibit the dumping of trash into storm drainage facilities.

3. Control through ordinance, order or similar means the discharge to a municipal separate storm sewer of spills, dumping, or disposal of materials other than stormwater.

Again, although the County's ordinances do not appear to expressly prohibit the discharge of materials other than storm water, rubbish ordinances regulate the collection and disposal of rubbish and debris during construction activities and the removal and accumulation of rubbish which is injurious to neighboring property or health/welfare. In addition, hazardous waste ordinances regulate the generation, storage and handling of hazardous wastes to ensure that such wastes are cleaned up and disposed of properly.

4. Control through interagency agreements among co-permittees the contribution of pollutants from one portion of the municipal system to another portion of the municipal system.
  - a. As a General Law County, Riverside County is empowered to enter into Joint Powers Agreements with other municipalities or jurisdictions.
  - b. An agreement to process the NPDES Municipal Permits has been established among the County, the RFC&WCD and all municipalities within the Santa Ana RWQCB jurisdiction.
5. Require compliance with conditions in ordinances, permits, contracts, or orders;

Each of the County's ordinances described herein contains enforcement provisions and penalties.

6. Carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including the prohibition of illicit discharges to the municipal separate storm sewer.

The County's ordinances include provisions to inspect for abatement of nuisance, inspect construction sites, and inspect for rubbish and trash violations. In addition, the County's ordinances contain inspection and monitoring provisions for hazardous waste facilities and plans relating to disclosure of hazardous wastes and formulation of emergency response plans.

B. City of Riverside

1. Prohibit through ordinance, order or similar means illicit discharges to the municipal separate storm sewer.

The Riverside Municipal Code ("RMC") ordinance does prohibit the discharge of wastewater generated by restaurants into storm drains or storm channels. The ordinance also prohibits the discharge of harmful or public nuisance or public hazard causing material to any storm drain or storm water channel. The ordinance further prohibits the discharge of any material into a storm drain which would harm underground waters or violate Regional Board requirements if it were to seep underground.

2. Control through ordinance, order or similar means the discharge to a municipal separate storm sewer of spills, dumping, or disposal of materials other than stormwater.



As indicated above, the RMC ordinance does prohibit the discharge of wastewater generated by restaurants into storm drains or storm channels, the discharge of harmful or public nuisance or public hazard causing material to any storm drain or storm water channel and the discharge of any material into a storm drain which, by seeping underground or reacting with the soil, would be detrimental to underground waters or which would violate RWQCB requirements. In addition, the ordinance prohibits the discharge of recovered pretreatment wastes into any sewer or storm drain opening.

3. Control through interagency agreements among co-permittees the contribution of pollutants from one portion of the municipal system to another portion of the municipal system.

An agreement to process the NPDES Municipal Permits has been established among the County, the RFC&WCD and all municipalities within the Santa Ana RWQCB jurisdiction.

4. Require compliance with conditions in ordinances, permits, contracts, or orders.

The RMC enforcement provisions expressly deal with discharges of wastewater in violation of its ordinance. Some of the enforcement provisions include declaration of public nuisance, issuance of stop work orders or cease and desist orders, or civil and criminal penalties, all of which arguably apply to discharges to storm drains in violation of the ordinance. In addition, the Public Works Director is given the authority to assess administrative costs resulting from damage on obstruction to the storm drain system.

5. Carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including the prohibition of illicit discharges to the municipal separate storm sewer.

The RMC's ordinance does not include any inspection or monitoring requirements applicable to discharge into storm drains. All such inspection and monitoring provisions deal explicitly with sewers.

C. City of Corona

1. Control through ordinance, permit, contract, order or similar means, the contribution of pollutants to the municipal storm sewer by stormwater discharges associated with industrial activity and the quality of stormwater discharged from sites of industrial activity.

The Corona Municipal Code ("CMC") requires the filing of business plans and hazardous materials inventories and the reporting of releases of hazardous materials. The CMC also prohibits the discharge of any harmful, nuisance or pollution-causing substance into any storm drain or storm water channel or natural watercourse. In addition, the CMC prohibits the discharge of any material into a storm drain which would harm usable underground waters by seeping underground or by being leached or by reacting with the soil, or which will violate any requirements of the Santa Ana Regional Board. The CMC also requires a permit to connect any property with any sewer. Zoning regulations also require conformance with general plans and, in some cases, require submission of site plans to include drainage system information and landscaping and grading plans. The CMC also prohibits the discharge of "unlawful

wastes"<sup>11</sup> into any publicly owned treatment works ("POTW").<sup>12</sup> Finally, the CMC contain extensive provisions governing the discharge of industrial wastewaters into POTWs.

2. Prohibit through ordinance, order or similar means illicit discharges to the municipal separate storm sewer.

The CMC prohibits the discharge of oil and other petroleum related products, flammable or explosive substances or any other substance which could obstruct storm drain flow.

The CMC also prohibits the discharge of any liquid containing crude petroleum or its by-products, materials containing "gasoline . . . or other flammable or explosive [substances]; [any] solid or viscous substance capable of causing obstruction to the flow or interfering with the proper operation of a storm, flood control and sanitary drainage system . . . [toxic or poisonous] [i]ndustrial wastes . . . Noxious or malodorous gas . . . Liquid or vapor having a temperature higher than eighty-five degrees Fahrenheit . . . Industrial wastes . . . [containing a certain percentage of] fat, oil or grease." CMC § 14.24.120.

3. Control through ordinance, order or similar means the discharge to a municipal separate storm sewer of spills, dumping, or disposal of materials other than stormwater.

The CMC requires permits to connect any property with any sewer and to divert waters from municipal storm drains. The CMC also authorizes an oil production control agency to issue

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<sup>11</sup> "Unlawful wastes" is defined in the CMC to include "[a]ny stormwater or any runoff from any field, roof, yard, driveway or street." CMC § 13.08.040 E.

<sup>12</sup> POTW means "a treatment works, including any sewers which convey wastewater to the treatment works, owned by the city." CMC § 13.08.010J.

permits for the deposit of water or wastewater into storm or sanitary drainage systems as long as such waters do not contain any crude, distilled or refined oil or other substances specified in California Fish & Game Code § 5650.<sup>13</sup>

4. Control through interagency agreements among co-permittees the contribution of pollutants from one portion of the municipal system to another portion of the municipal system.

An agreement to process the NPDES Municipal Permits has been established among the County, the RFC&WCD and all municipalities within the Santa Ana Regional Board jurisdiction.

5. Require compliance with conditions in ordinances, permits, contracts, or orders; and

The CMC contains a variety of enforcement provisions. For example, the CMC requires compliance with sewer connection and wastewater discharge permits. In addition, the Corona City Council may suspend or revoke a wastewater disposal permit. However, there do not appear to be compliance provisions for water diversion permits.

Violations of various provisions of the CMC are punishable by legal, equitable and/or injunctive relief.

6. Carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with permit

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<sup>13</sup> Section 5650 of the California Fish & Game Code prohibits the discharge into "waters of this State" a number of materials, including petroleum, and related products, refuse from refineries, tanneries, distilleries, chemical works, mills or factories, and "any substance deleterious to fish plant life or bird life," among other things.

conditions including the prohibition of illicit discharges to the municipal separate storm sewer.

Inspection rights are available to the oil production control agency to investigate "any suspected violations of this title or applicable provisions" of the CMC. See CMC § 14.32.040.

D. City of Norco

1. Control through ordinance, permit, contract, order or similar means, the contribution of pollutants to the municipal storm sewer by stormwater discharges associated with industrial activity and the quality of stormwater discharged from sites of industrial activity.

Norco's ordinance regarding sewer use applies, in part, to "combined sewers," which are defined as sewers intended to receive both wastewater and storm or surface water." See Norco Code § 14.07.040(8). Norco's sewer ordinances restrict private wastewater disposal systems and provide for the issuance of permits in order to expand or reconstruct any existing private wastewater disposal system. Permits are also required for any alterations or connections to public sewers. Norco's Drainage Plan provides for the construction of drainage facilities for the disposal of flood waters and storm waters. Floodplain management ordinances restrict or prohibit uses of water and sewer lines to protect health, safety and property ("flooding" is defined to include "the unusual and rapid accumulation or runoff of surface waters from any source.") The Uniform Building Code regulates collection and disposal of rubbish and debris during construction activities.

2. Prohibit through ordinance, order or similar means illicit discharges to the municipal separate storm sewer.

Norco's sewer ordinances expressly prohibit illegal discharges into "natural outlets."<sup>14</sup> It is also illegal to discharge anything harmful or causing a public nuisance into any storm drain or storm drain channel, or to discharge anything that might seep underground or react with soil.

3. Control through ordinance, order or similar means the discharge to a municipal separate storm sewer of spills, dumping, or disposal of materials other than stormwater.

As indicated above, Norco's sewer ordinances expressly prohibit the discharge of anything harmful or causing a public nuisance into any storm drain or any storm drain channel. In addition, Norco's floodplain management ordinance provide for the issuance of permits before any development can take place on designated floodplains.

4. Control through interagency agreements among co-permittees the contribution of pollutants from one portion of the municipal system to another portion of the municipal system.

An agreement to process the NPDES Municipal Permits has been established among the County, the RFC&WCD and all municipalities within the Santa Ana RWQCB jurisdiction.

5. Require compliance with conditions in ordinances, permits, contracts, or orders; and

Norco's Code provides that all violations of its Code are punishable by fines and/or imprisonment.

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<sup>14</sup> "Natural outlet" includes storm sewer and combined sewer overflows into any surface or groundwater.



6. Carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including the prohibition of illicit discharges to the municipal separate storm sewer.

The Norco Code contains inspection provisions for private wastewater disposal and for the connection of building sewers to public sewers. The director of Public Works also has inspection authority to ensure compliance with storm sewer provisions; however, there are no monitoring or surveillance provisions relating to storm water.

- E. City of Canyon Lake. The City of Canyon Lake has adopted the ordinances of the County of Riverside. The City of Canyon Lake is a party to the Agreement to implement the DAMP in the Santa Ana RWQCB area. The analysis and conclusions pertaining to the County of Riverside as set forth above apply also to Canyon Lake.

- F. City of Lake Elsinore. As of the writing of this section of the DAMP, there is insufficient information available to analyze the legal authorities of the City of Lake Elsinore; however, Lake Elsinore is a party to the agreement to process the NPDES Municipal Permit among the County, the RFC&WCD and all municipalities within the Santa Ana RWQCB jurisdiction.

- G. City of Beaumont

1. Control through ordinance, permit, contract, order or similar means, the contribution of pollutants to the municipal storm sewer by stormwater discharges associated with industrial activity and the quality of stormwater discharged from sites of industrial activity.

The Beaumont Code prohibits the discharge of storm water to sanitary sewers and provides that storm water must instead be

discharged to specifically designated sewers. In addition, building and zoning ordinance violations are nuisances, polluted and stagnant water are public nuisances, and any obstruction to the free flow of water through any drainage facility is a public nuisance.

Finally, direct and indirect contributors to the municipal wastewater system must obtain permits based on RWQCB requirements.

2. Prohibit through ordinance, order or similar means illicit discharges to the municipal separate storm sewer.

Discharge of stormwater into the POTW is prohibited, and all excessive discharges are prohibited.

In addition, the Beaumont Code prohibits disposal of waste water or other polluted water which would create a hazard or nuisance or would impair usefulness of groundwater or surface water. Finally, the Beaumont Code prohibits discharge of storm water or runoff into sewers.

3. Control through ordinance, order or similar means the discharge to a municipal separate storm sewer of spills, dumping, or disposal of materials other than stormwater.

The Beaumont Code does not appear to contain ordinances regarding the disposal of materials other than storm water.

4. Control through interagency agreements among co-permittees the contribution of pollutants from one portion of the municipal system to another portion of the municipal system.

An agreement to process the NPDES Municipal Permit has been established among the County of Riverside, the RCFC&WCD and all municipalities within the Santa Ana RWQCB jurisdiction.

5. Require compliance with conditions in ordinances, permits, contracts, or orders.

The Beaumont Code includes a number of enforcement provisions. For example, all building and zoning ordinance violations are nuisances which must be abated in order to avoid penalties. In addition, improper connections to sewerage systems may be disconnected by the city manager and damages may be assessed for harm to the sewer system.

Wastewater discharge enforcement provisions include revocation of permits, hearings, legal, equitable or injunctive relief, and civil and criminal penalties.

6. Carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including the prohibition of illicit discharges to the municipal separate storm sewer.

The Beaumont Code contains some monitoring and inspection provisions including those for industrial wastewater and public sewers. In addition, the Beaumont Business Plan Ordinance provides a right of entry for Chief, Director, Health Officer and City Manager to determine whether an act or condition constitutes a public nuisance. Finally, there are reporting, monitoring and inspection requirements for wastewater discharge permits. Again, however, there are no express inspection or monitoring provisions relating to storm water discharge.

H. City of Moreno Valley

The City of Moreno Valley has incorporated all of the Riverside County Ordinances as its own by adopting Ordinances 1 and 10. In addition, all resolutions, rules and regulations of Riverside County which have been applicable in implementation of the incorporated ordinances have also been incorporated. The City of Moreno Valley has changed all references to County officials to the analogous city officials. Moreno Valley also provides that "[w]henever in the enactments of the County which are continued in effect by the City there is a reference to "Planning Commission," "Board of Zoning Adjustment," "Board of Appeals," or "Zoning Administrator," this reference shall be interpreted to mean that these agencies or officials are acting as the agents of the City of Moreno Valley." Ordinance No. 1, § 3(d).

Government Code Section 35441 provided authority for the City of Moreno Valley to enact its ordinance.

I. City of Perris

The City of Perris has stated that it has adopted all of the Riverside County Ordinances and has not passed any additional ordinances pertaining to storm water quality. The analysis and conclusions pertaining to the County of Riverside apply also to the City of Perris.

J. City of San Jacinto

1. Control through ordinance, permit, contract, order or similar means, the contribution of pollutants to the municipal storm sewer by stormwater discharges associated with industrial activity and the quality of storm water discharged from sites of industrial activity.

The City of San Jacinto's Code requires that storm drainage facilities erected by developers be constructed and maintained in accordance with City standards.

The City of San Jacinto adopted the Uniform Building Code which regulates collection and disposal of rubbish and debris during construction activities and other ordinances regulate the removal of rubbish and prohibit the accumulation of rubbish which is injurious to the neighboring property or to the health or welfare of the residents in the vicinity.

The City of San Jacinto enjoins the storage, discharge, handling, maintenance, use or other dealing with hazardous substances that violate federal, state or local law and that create an identifiable risk of accidental release of such substances that might affect the health, safety or welfare of persons or adversely affect the air or water quality. Additionally, the City of San Jacinto requires approval of the County Department of Health prior to the transport or disposal of hazardous waste.

2. Prohibit through ordinance, order or similar means illicit discharges to the municipal separate storm sewer.

The City of San Jacinto's Code does not appear to contain ordinances regarding illicit discharges of stormwater into the municipal separate storm sewer.

3. Control through ordinance, order or similar means the discharge to a municipal separate storm sewer of spills, dumping, or disposal of materials other than storm water.

Although the City of San Jacinto's ordinances do not appear to expressly prohibit the discharge of materials other than storm water, the San Jacinto's nuisance abatement ordinance enjoins the discharge of hazardous substances that violate federal, state or local law and that create an identifiable risk of accidental release of such substances that might adversely affect water

quality. Additionally, the San Jacinto Municipal Code requires approval of the County Department of Health prior to the disposal of hazardous waste.

4. Control through interagency agreements among co-permittees the contribution of pollutants from one portion of the municipal system to another portion of the municipal system.

An agreement to process the NPDES Municipal Permits has been established among the County, the RCFC&WCD and all municipalities within the Santa Ana RWQCB jurisdiction.

5. Require compliance with conditions in ordinances, permits, contracts, or orders.

As a general law city, the City of San Jacinto is invested with the powers under Article II, Section 7 of the California Constitution to "enforce within its limits all local, police, sanitary, and other ordinances and regulations not in conflict with general laws."

Civil and penal procedures are available to enjoin nuisances, including nuisances that adversely affect water quality.

6. Carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including the prohibition of illicit discharges to the municipal separate storm sewer.

The City of San Jacinto does not appear to have any ordinances that address inspection or monitoring requirements applicable to discharge into storm drains.



K. City of Hemet

1. Control through ordinance, permit, contract, order or similar means, the contribution of pollutants to the municipal storm sewer by stormwater discharges associated with industrial activity and the quality of storm water discharged from sites of industrial activity.

The zoning ordinances of the City of Hemet regarding development standards in industrial and manufacturing zones require such developments to submit plans describing treatment and disposal of sewage and industrial toxic wastes. These plans must comply with applicable City and County Health Department and SWRCB regulations.

The City of Hemet has adopted the Uniform Building Code which requires sediment control plans for grading construction, including practices such as temporary control measures and landscaping requirements.

2. Prohibit through ordinance, order or similar means illicit discharges to the municipal separate storm sewer.

Although the City of Hemet's ordinances do not completely prohibit such illicit discharges, a subdivision ordinance prohibits the use of streets for flood control and drainage purposes if such discharges are not in the interest of public health, safety and welfare.

3. Control through ordinance, order or similar means the discharge to a municipal separate storm sewer of spills, dumping, or disposal of materials other than stormwater.

Although the City of Hemet's ordinances do not appear to expressly prohibit the discharge of materials other than storm water into the municipal separate storm sewer, rubbish ordinances regulate the collection of garbage and refuse for the purpose of preserving the health and general welfare of the city. In addition, the City of Hemet has adopted the Uniform Fire Code which regulates the disposal of hazardous waste and materials to ensure that such wastes are disposed of properly.

4. Control through interagency agreements among co-permittees the contribution of pollutants from one portion of the municipal system to another portion of the municipal system.

An agreement to process the NPDES Municipal Permits has been established among the County, the RCFC&WCD and all municipalities within the Santa Ana RWQCB jurisdiction.

5. Require compliance with conditions in ordinances, permits, contracts, or orders.

The Hemet Municipal Code requires developers in industrial and manufacturing zones to implement their proposed plans regarding treatment and disposal of sewage by conditioning approval of the development upon the implementation of such plans.

6. Carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including the prohibition of illicit discharges to the municipal separate storm sewer.

The zoning ordinances of the City of Hemet authorize officials to monitor industrial and manufacturing developments to ensure

compliance with the requirements regarding the implementation of plans to dispose of sewage and other waste material.

L. City of Calimesa

The City of Calimesa has stated that it has adopted all of the Riverside County Ordinances and has not passed any additional ordinances pertaining to storm water quality. The analysis and conclusions pertaining to the County of Riverside apply also to the City of Calimesa.

M. Riverside County Flood Control and Water Conservation RFC&WCD

The enabling legislation for the RFC&WCD, Water Code Uncodified Act 6642, provides very broad authority for the RFC&WCD to protect water quality and to "make and enforce all needful rules and regulations . . . ." See II(B)(1)(f), (g), supra. Thus, the RFC&WCD has the authority to adopt an ordinance to implement the requirements of a storm water program.

In addition, an agreement to process the NPDES Municipal Permits has been established among the County, the RFC&WCD and all municipalities within the Santa Ana RWQCB jurisdiction.

#### IV. PROPOSED APPROACHES TO IMPROVE LOCAL ORDINANCES

In sum, the co-permittees have varying degrees of legal authority to implement and enforce many facets of the DAMP. In particular, the County appears to have adequate legal authority in most respects, except for its lack of inspection, monitoring and enforcement provisions for anything other than hazardous wastes. Thus, the County would need to enact additional inspection, monitoring and enforcement provisions to pertain specifically to stormwater discharge. This analysis also applies to the cities of Moreno Valley, Perris and Calimesa which have adopted the County's ordinances.

To a lesser degree, some of the other co-permittees have authority to implement and enforce the DAMP. The City of Beaumont, for example, prohibits the discharge of storm water into the POTW. Beaumont, however, does not appear to have ordinances regarding the disposal of materials other than storm water. As discussed more fully in III above, the authority of the other co-permittees is inconsistent and, in some cases, incomplete..

Most of the local ordinances presently in effect predate the EPA NPDES Requirements and, consequently, were not drafted to correspond to the requirements of the federal program. In some cases, the variances from the federal requirements are substantial. The City Attorneys and County Counsel must determine whether to modify their respective codes and ordinances to conform precisely to the requirements of the EPA regulations.

Local ordinances may be tailored to conform with EPA Regulations either through adoption of focused amendments to existing ordinances or through adoption of a new ordinance expressly addressing the DAMP's requirements. Each of the co-permittees is responsible for choosing the more appropriate approach for its jurisdiction. For those cities with substantive deficiencies in legal authority, the adoption of the model ordinance rather than the review and amendment of existing ordinances would be advantageous because it would avoid a "fragmented or balkanized"<sup>15</sup> program. Moreover, case by case review of existing ordinances probably would be time consuming and would leave open the possibility for gaps in the program, whereas the adoption of a model ordinance directly would track the requirements of the DAMP.

Attached is a model ordinance based upon one that was drafted for Alameda County and approved by the San Francisco RWQCB - Region II earlier this year. We recommend that the co-permittees wishing to adopt a model ordinance use this as a model for enacting their ordinances.

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<sup>15</sup> The preamble to the EPA Regulations states that "fragmented or balkanized programs must be avoided." 55 Fed. Reg. at 48039.

## V. CONCLUSION

Present constitutional and statutory authority of the co-permittees addresses most of the DAMP elements, although there are some restrictions on local authority resulting primarily from state and federal preemption. This problem should be solved easily through the issuance of individual permits for affected facilities. The actual exercise of legal authority by the individual co-permittees, however, generally does not correspond to the scope and focus of the EPA Regulations and the Santa Ana and San Diego NPDES Permits. To varying degrees, each of the existing ordinances that has been made available for examination contains deviations from the federal and regional board requirements. To correct these deficiencies, each entity should determine whether it should adopt a model ordinance or portion(s) thereof to supplement its existing regulatory scheme.

individual NPDES permit relating to storm water discharges shall comply with and undertake all activities required by such permit.

12.5 Compliance with BMPs. Where BMP guidelines or requirements have been adopted by any federal, State of California, regional, and/or County agency, for any activity, operation, or facility which may cause or contribute to storm water pollution or contamination, illicit discharges, and/or discharges of non-storm water to the storm water system, every person undertaking such activity or operation, or owning or operating such facility shall comply with such guidelines or requirements as may be identified by the Director of Public Works.

13. Watercourse Protection, Grading, Erosion, and Encroachment Ordinances.  
(The exact language of such ordinances will be incorporated here)

### ARTICLE III

#### INSPECTION AND ENFORCEMENT

14. Authority to Inspect. Whenever necessary to make an inspection to enforce any of the provisions of this Ordinance, or whenever an Authorized Enforcement Officer has reasonable cause to believe that there exists in any building or upon any premises any condition which constitutes a violation of the provisions of this Ordinance, the officer may enter such building or premises at all reasonable times to inspect the same or perform any duty imposed upon the officer by this Ordinance; provided that (i) if such building or premises is occupied, he or she first shall present proper credentials and request entry; and (ii) if such building or premises is unoccupied, he or she first shall make a reasonable effort to locate the owner or other persons having charge or control of the building or premises and request entry.

Any such request for entry shall state that the property owner or occupant has the right to refuse entry and that, in the event such entry is refused, inspection may be made only upon issuance of a search warrant by a duly authorized magistrate. In the event the owner and/or occupant refuses entry after such request has been made, the officer is hereby empowered to seek assistance from any court of competent jurisdiction in obtaining such entry.



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Routine or area inspections shall be based upon such reasonable selection processes as may be deemed necessary to carry out the objectives of this ordinance, including but not limited to, random sampling and/or sampling in areas with evidence of storm water contamination, illicit discharges, discharge of non-storm water to the storm water system, or similar factors.

14.1 Authority to Sample and Establish Sampling Devices. With the consent of the owner or occupant or pursuant to a search warrant, any Authorized Enforcement Officer may establish on any property such devices as are necessary to conduct sampling or metering operations. During all inspections as provided herein, the officer may take any samples deemed necessary to aid in the pursuit of the inquiry or in the recordation of the activities on-site.

14.2 Notification of Spills. All persons in charge of a facility or responsible for emergency response for a facility are personally responsible to train facility personnel and maintain notification procedures to assure that immediate notification is provided to the County of any suspected, confirmed or unconfirmed release of material, pollutants or waste creating a risk of discharge in to the County storm drain system.

As soon as any person in charge of a facility or responsible for emergency response for a facility has such knowledge, such person shall take all necessary steps to ensure the discovery and containment and clean up of such release and shall notify the County of the occurrence by telephoning [ILLICIT DISCHARGE HOTLINE] and confirming the notification by correspondence to Director of Public Works, \_\_\_\_\_, CA, Attn: Spill Notification.

14.3 Requirement to Test or Monitor. Any Authorized Enforcement Officer may request that any person engaged in any activity and/or owning or operating any facility which may cause or contribute to storm water pollution or contamination, illicit discharges, and/or discharge of non-storm water to the storm water system, undertake such monitoring activities and/or analyses and furnish such reports as the officer may specify. The burden, including costs, of these activities, analyses and reports shall bear a reasonable relationship to the need for the monitoring, analyses and reports and the

benefits to be obtained. The recipient of such request shall undertake and provide the monitoring, analyses and reports required.

In the event the owner or operator of a facility subject to a monitoring and/or analyses order fails to conduct required monitoring and/or analyses and furnish the required reports in the form required, the Authorized Enforcement Officer may cause such monitoring and/or analyses and the cost, therefore, including the reasonable additional administrative costs incurred by the County shall be borne by the owner of the property and the cost thereof shall be invoiced to the owner of the property. If the invoice is not paid within sixty (60) days of the issuance thereof, the costs shall be a lien upon and against the property and continue in existence until the same shall be paid. If the lien is not satisfied by the owner of the property within three (3) months after the completion by an Authorized Enforcement Officer of the required monitoring and/or analyses and reports, the property may be sold in satisfaction thereof in a like manner as other real property is sold under execution.

15. Violations Constituting Misdemeanors. Unless otherwise specified by ordinance, the violation of any provision of this Ordinance, or failure to comply with any of the mandatory requirements of this Ordinance shall constitute a misdemeanor; except that notwithstanding any other provisions of this Ordinance, any such violation constituting a misdemeanor under this Ordinance, at the discretion of the Authorized Enforcement Officer may be charged and prosecuted as an infraction.
16. Penalty for Violation. Upon conviction of a misdemeanor, a person shall be subject to payment of a fine, or imprisonment, or both, not to exceed the limits set forth in California Government Code Section 36901.

Upon conviction of an infraction, a person shall be subject to payment of a fine, not to exceed the limits set forth in California Government Code Section 36900. After a third conviction for a violation of the same provision, subsequent violations within a twelve (12) month period may be charged as a misdemeanor.

17. Continuing Violation. Unless otherwise provided, a person, firm, corporation or organization shall be deemed guilty of a separate offense for each and

every day during any portion of which a violation of this Ordinance is committed, continued or permitted by the person, firm, corporation or organization and shall be punishable accordingly, as herein provided.

18. Concealment. Causing, permitting, aiding, abetting or concealing a violation of any provision of this Ordinance shall constitute a violation of such provision.
19. Acts Potentially Resulting in violation of Federal Clean Water Act and/or Porter-Cologne Act. Any person who violates any provision of this Ordinance, any provision of any permit issued pursuant to this Ordinance, or who discharges waste or wastewater which causes pollution, or who violates any cease and desist order, prohibition, or effluent limitation, also may be in violation of the federal Clean Water Act and/or Porter-Cologne Act and may be subject to the sanctions of those Acts including civil and criminal penalties. Any enforcement action authorized under this Ordinance also should include notice to the violator of such potential liability.
20. Violations Deemed a Public Nuisance. In addition to the penalties hereinbefore provided, any condition caused or permitted to exist in violation of any of the provisions of this Chapter shall be considered a threat to the public health, safety and welfare, may be declared and deemed a nuisance, and may be summarily abated and/or restored by any Authorized Enforcement Officer, and/or civil action to abate, enjoin or otherwise compel the cessation of such nuisance by County Counsel.

The cost of such abatement and restoration shall be borne by the owner of the property and the cost thereof shall be a lien upon and against the property and such lien shall continue in existence until the same shall be paid. If such lien is not satisfied by the owner of the property within three (3) months after the completion by the Authorized Enforcement Officer of the removal of the nuisance and the restoration of the property to its original condition, the property may be sold in satisfaction thereof in a like manner as other real property is sold under execution.

If any violation of this Ordinance constitutes a seasonal and recurrent nuisance, the Director of Public Works shall so declare. Thereafter such seasonal and recurrent nuisance shall be abated every year without the necessity of any further hearing.

In any administrative or civil proceeding under this Ordinance in which the County prevails, the County shall be awarded all costs of investigation, administrative overhead, out-of-pocket expenses, costs of administrative hearings, costs of suit and reasonable attorneys' fees.

21. Judicial Review. The provisions of Section 1094.6 of the California Code of Civil Procedure are applicable to judicial review of County decisions pursuant to this Ordinance.
22. Civil Actions. In addition to any other remedies provided in this section, any violation of this section may be enforced by civil action brought by the County. In any such action, the County may seek, and the Court shall grant, as appropriate, any or all of the following remedies:
  - (1) A temporary and/or permanent injunction.
  - (2) Assessment of the violator for the costs of any investigation, inspection, or monitoring survey which led to the establishment of the violation, and for the reasonable costs of preparing and bringing legal action under this subsection.
  - (3) Costs incurred in removing, correcting, or terminating the adverse effects resulting from the violation.
  - (4) Compensatory damages for loss or destruction to water quality, wildlife, fish and aquatic life. Assessments under this subsection shall be paid to the County to be used exclusively for costs associated with monitoring and establishing storm water discharge pollution control systems and/or implementing or enforcing the provisions of this Ordinance.
23. Administrative Enforcement Powers. In addition to the other enforcement powers and remedies established by this ordinance, any Authorized Enforcement Officer has the authority to utilize the following administrative remedies.
  - 23.1 Cease and Desist Orders. When an Authorized Enforcement Officer finds that a discharge has taken place or is likely to take place in violation of this

Ordinance, the officer may issue an order to cease and desist such discharge, or practice, or operation likely to cause such discharge and direct that those persons not complying shall: a) comply with the requirement; b) comply with a time schedule for compliance, and/or c) take appropriate remedial or preventive action to prevent the violation from recurring.

- 23.2 Notice to Clean. Whenever an Authorized Enforcement Officer finds any oil, earth dirt, grass, weeds, dead trees, tin cans, rubbish, refuse, waste or any other material of any kind, in or upon the sidewalk abutting or adjoining any parcel of land, or upon any parcel of land or grounds, which may result in an increase in pollutants entering the County storm drain system or a non-storm water discharge to the County storm drain system, he or she may give notice to remove such oil, earth, dirt, grass, weeds, dead trees, tin cans, rubbish, refuse, waste or other material, in any manner that he or she reasonably may provide. The recipient of such notice shall undertake the activities as described in the notice.

In the event the owner or operator of a facility fails to conduct the activities as described in the notice, the Authorized Enforcement Officer may cause such required activities as described in the notice, and the cost thereof shall be invoiced to the owner of the property. If the invoice is not paid within sixty (60) days, a lien shall be placed upon and against the property. If the lien is not satisfied by the owner of the property within three (3) months after the completion of the required activities by the Authorized Enforcement Officer the property may be sold in satisfaction thereof in a like manner as other real property is sold under execution.

24. Authority to Arrest or Issue Citations. Authorized Enforcement Officers shall have and are hereby vested with the authority to arrest or cite and release any person who violates any Section of this Ordinance in the manner provided by the California Penal Code for the arrest or release on citation of misdemeanors or infractions as prescribed by Chapters 5, 5c, and 5d of Title 3, Part 2 of the California Penal Code (or as the same may be hereinafter amended).

Such Authorized Enforcement Officers or employees may issue a citation and notice to appear in the manner prescribed by Chapter 5c of Title 3, Part 2 of the Penal



Code, including Section 853.6 (or as the same may hereafter be amended). It is the intent of the County Board of Supervisors that the immunities prescribed in Section 836.5 of the Penal Code be applicable to public officers or employees or employees acting in the course and scope of employment pursuant to this Chapter.

[Bail for infractions shall be as set by resolution of the County Board of Supervisors.]

25. Nonexclusivity of Remedies. Remedies under this Ordinance are in addition to and do not supersede or limit any and all other remedies, civil or criminal. The remedies provided for herein shall be cumulative and not exclusive.
26. Appeal. Any person, firm, corporation or organization required to perform monitoring, analyses, reporting and/or corrective activities by an Authorized Enforcement Officer who is aggrieved by the decision of the Authorized Enforcement Officer may appeal such decision to the Director of Public Works within 10 days following the effective date of the decision by writing to the Director of Public Works. Upon receipt of such request, the Director of Public Works shall request a report and recommendation from the Authorized Enforcement Officer and shall set the matter for hearing at the earliest practical date. At said hearing, the Director of Public Works may hear additional evidence, and may reject, affirm or modify the Authorized Enforcement Officer's decision. Such decision shall be final.
27. Disclaimer of Liability. The degree of protection required by this Ordinance is considered reasonable for regulatory purposes and is based on scientific, engineering and other relevant technical considerations. The standards set forth herein are minimum standards and this Ordinance does not imply that compliance will ensure that there will be no unauthorized discharge of pollutants into the waters of the United States. This Ordinance shall not create liability on the part of the County, any officer or employee thereof for any damages that result from reliance on this Chapter or any administrative decision lawfully made thereunder.



ARTICLE IV

COORDINATION WITH OTHER PROGRAMS

28. Coordination with Hazardous Materials Inventory and Response Program.  
The first revision of the business plan for any facility subject to the County's hazardous materials inventory and response program shall include a program for compliance with this Chapter, including the prohibitions on non-storm water discharges and illicit discharges, and the requirement to reduce storm water pollutants to the extent practicable.

COUNTY OF RIVERSIDE, a subdivision of the  
State of California

By: \_\_\_\_\_  
Chairman, Board of Supervisors of the County  
of Riverside, State of California

APPROVED AS TO FORM:

\_\_\_\_\_  
County Counsel

ATTEST:

\_\_\_\_\_  
\_\_\_\_\_, Clerk, The Board  
of Supervisors of the County of  
Riverside, State of California

## APPENDIX E

### PUBLIC EDUCATION/PARTICIPATION ELEMENT

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#### E.1 INTRODUCTION

The approach set forth in the DAMP for Riverside County (and the SAR-DAMP) focuses primarily on source control--keeping pollutants out of the storm drain system entirely rather than treating storm water at the "end of the pipe." This approach is widely recognized as the most cost-effective and efficient means to meet the permittees' goal of reducing pollutants in storm water to the maximum extent practicable. Because source reduction means controlling human activity and encouraging behavioral change, educating the public about the effects of storm water pollution and fostering their participation in pollution control are critical to the success of the SAR-DAMP and the resultant Storm Water Management Program.

The municipal Storm Water NPDES permit for the permittees under the jurisdiction of the Santa Ana RWQCB requires: "programs to educate the public on proper disposal of hazardous/toxic wastes. These may include public workshops, meetings, notifications by mail, collection programs for household hazardous wastes, etc."

A number of similar educational campaigns focussed on pollution control have been implemented nationwide in the past twenty years, such as litter control and recycling, and these programs provide several valuable lessons for the storm water public education effort. First, evaluation of these other programs indicates that the American public is quite willing to participate in reducing environmental pollution. Second, the message communicated must be clear, relevant, catchy, contain positive encouragement rather than a negative tone, and provide the public with easily accessible and simple alternatives. Finally, behavioral change takes time, and the public must be encouraged by seeing or hearing the message over and over again that changing their own behavior will have beneficial results. Therefore, successful education of the public about storm water pollution will require widespread dissemination and continual reinforcement of a central pollution control message over a long period of time.

## E.2 GOALS OF THE PE/P ELEMENT

The purpose of this element of the DAMP is to establish a framework for planning a County-wide public education/participation (PE/P) program. This framework outlines the evaluation and planning activities and tasks which must be conducted prior to developing a coherent, effective strategy for educating the public about storm water pollution control. In general, this strategy will entail a two-fold approach: educating appropriate agency staff about the purpose, use, and requirements of the Regional DAMPs (and forthcoming SWMPs) and educating the public about storm water pollution control.

First, since compliance with the NPDES permit's mandate to reduce storm water pollution requires a coordinated and well-understood effort by all the permittees, the various departments implementing best management practices within each permittee agency, and three RWQCBs, it is essential that all appropriate municipal, County, and agency staff are educated about storm water management issues in general and trained about the purpose, use, and requirements of the DAMP in particular.

The second component of this educational process will involve conducting outreach to diverse community sectors in Riverside County to inform them about the sources and impacts of storm water pollution and to encourage them to control storm water pollution in their daily activities. Because the concept of storm water pollution is new and presently little understood by the general public, the objective of the PE/P program is to educate and inform diverse audiences throughout the County about storm water pollution, including residents, school children, commuters, small businesses, people who perform their own household or automobile repair or maintenance, and land or water recreational users.

In addition, in an effort to be cost-effective and to avoid "reinventing the wheel," this PE/P element provides for coordination with the public education components of the large number of programs at the state, County, and local level which address water quality or pollution control issues.

In summary, the primary goals of the PE/P program will be to:

- Educate/inform the general public, the regulators, the Flood Control District and agency personnel, and other key decision makers on the purpose, use, and requirements of the DAMP,
- Inform the public about the origins and causes of storm water runoff pollution and its effect on the receiving waters,
- Educate/inform the public about feasible, cost-effective alternative products and activities that will reduce storm water pollution,
- Encourage active public involvement in the effort to reduce the amount of pollutants entering the storm drain system, and
- Coordinate public education efforts with existing storm water management and other related environmental education programs to share resources, coordinate outreach efforts, and avoid costly duplication of effort.

### **E.3 ACTION PLAN FOR PUBLIC EDUCATION**

This section describes a series of action items to be completed by the co-permittees to plan and develop a PE/P program that is tailored to the specific informational needs and concerns of Riverside County.

#### **Action 1: Establish PE/P Program Management Structure**

PE/P Advisory Sub-committee: A key element of the PE/P Plan will be the establishment of a PE/P Advisory sub-committee to the Advisory Committee to provide guidance in developing a consistent, well-defined, PE/P program. The chairperson of the sub-committee will be a representative of RCFC&WCD. The sub-committee will be selected by the chairperson and should consist of members of the permittees' staff who are knowledgeable about public education and about the various target audiences in Riverside County. To encourage future inter-program coordination, the sub-committee may also include representative(s) from existing County or city programs which disseminate related pollution control messages, such as household hazardous waste, water usage, or recycling programs. In addition, the sub-committee may include other environmental educators with experience in Riverside County.

The PE/P Advisory sub-committee will meet regularly and will be responsible for implementing the PE/P program planning activities set forth in this section of the DAMP, including evaluating alternatives, recommending budgets, and developing the PE/P Plan.

**Action 2: Educate Agency Personnel About the DAMP<sup>17</sup>**

DAMP Workshop: Following finalization of the DAMP, a half-day workshop will be conducted. The purpose of the workshop will be to establish the roles and responsibilities of each of the permittees in carrying out the tasks and activities set forth in the DAMP.

Slide Show: A 15-minute slide show will be prepared for use at the workshops in educating permittee and agency personnel about the purpose, use, and requirements of the DAMP.

**Action 3: Develop Public Education/Participation (PE/P) Plan**

The PE/P Advisory Committee will provide substantial guidance in developing a PE/P Plan, which will describe specific materials to be developed and activities to be conducted during the implementation phase of the PE/P program. The Plan will identify audiences to be targeted and existing materials from other storm water management programs which may be tailored to Riverside County. In addition, the PE/P Plan will include a schedule, assign responsibilities for implementation, and provide a budget estimating the total cost of implementing the Plan. The PE/P Plan represents the culmination of the public education planning phase conducted as part of this DAMP planning process. For this reason, the following tasks will be conducted to collect appropriate data and obtain community input into the planning process:

Focus group meetings: The PE/P Advisory Committee will evaluate the need to hold one or several focus group meetings with "experts" in the community. The objectives of the focus group meeting(s) would be to explain the goals of the PE/P program, and then to

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A public education meeting was held January 6, 1993 to inform citizens about the DAMP for Riverside County.



gain input from the participants regarding the status of other educational programs with an environmental message, to solicit information regarding community needs, to identify existing resources and information distribution networks, and request input concerning relevant outreach methods to reach diverse community residents. Meeting participants may represent a broad cross-section of organizations and population sectors of the community, or the participants may be invited from a specific community, business, or industrial sector.

PE/P Program Message/Theme/Slogan: The PE/P Advisory Committee will define a concise, compelling message to be used in public education materials. To be effective, the message chosen should demonstrate to the public the connection between reducing storm water pollution and protecting human and environmental health. For example, the central message of the PE/P Program may be that storm water pollution is a threat to water quality, and by reducing storm water pollution, the public can help protect the quality of the County's drinking water supply and maintain recreational uses of water bodies. Another message may describe how air pollution contributes to storm water pollution, and explain that by taking steps to reduce air pollution, the public could improve water quality.

To define this message, the PE/P Advisory Committee could hold brainstorming meetings and solicit feedback from environmental educators and public education coordinators for other storm water or pollution prevention programs.

The PE/P Advisory Committee may also consider choosing a catchy slogan and/or mascot for use on public education materials. Examples of slogans which have been effective for other environmental education programs include, "Give a Hoot! Don't Pollute!" and "Only Rain in the Storm Drain!" Since the public is often compelled by "warm and fuzzy" images of animals, choosing an animal mascot may build public identification with the PE/P Program and encourage their participation in storm water pollution reduction. Characters such as Woodsy the Owl, Ranger Rick, and Smokey the Bear have been created by other programs to promote an educational message. Selecting a slogan and/or a mascot may be accomplished by brainstorming or with the assistance of a professional public relations or advertising firm in conjunction with the development of the media campaign.



Coordinate with Existing, Related Programs: A key factor in planning a cost-effective and well-organized PE/P Program for Riverside County is coordinating with existing, related programs at the local, state, and national level. Such programs include storm water pollution control programs being developed in counties adjacent to Riverside County and throughout California; environmental education programs at the community level offered through museums, parks, environmental organizations, or schools; and County-wide or municipal efforts to promote ride sharing, recycling, water conservation, and proper household hazardous waste disposal.

Such interaction between the PE/P Advisory Committee and existing, related programs would allow for local knowledge, resources, and informational networks to be incorporated into the PE/P Program planning process. Also, it could allow for the storm water pollution control message to be incorporated into materials produced by other programs, thus reinforcing its importance. Finally, coordination may allow for cost-sharing efforts between the programs. One example of dovetailing efforts would be to coordinate with local water districts and cities to encourage the public not only to save water, but to protect its quality by reducing storm water pollution. Similarly, the storm water pollution control message could be to reinforce the importance of improving air quality in the County: reducing air pollution also reduces storm water pollution. More information on existing programs and resources is presented in Section E.4.

Coordination will involve a series of tasks: identifying existing, related programs and appropriate contact persons; evaluating the type of coordination necessary with each of the programs; and defining methods for coordination (i.e., meetings, copying correspondence, etc.).

Adapt Existing Storm Water Education Materials: The PE/P Advisory Committee will identify what materials are available from other storm water management public education programs (a partial listing is included in Section IV, Existing Resources). The PE/P Advisory Committee will evaluate which of these materials could be adapted and tailored to the needs and specific characteristics of Riverside County. If possible, the committee should retain the contractor that created the materials originally to adapt the materials for Riverside County. In the event that the original contractor is not available, a professional contractor should be retained to perform this task. In most cases, the text

of the materials, in addition to the art work, will have to be revised to reflect the character of Riverside County and its residents. In any case, procedures would be followed to ensure that permission for use of materials is secured and proper credit is given to the original creators of materials.

Outreach to Community Service, Neighborhood, and Environmental Groups: In developing the PE/P Plan, the PE/P Advisory Committee will identify appropriate neighborhood associations, environmental organizations, youth groups, and community service groups to which the PE/P Program could conduct public education outreach efforts. For example, community services groups such as the Kiwanis Club, Lions Club, or Rotary Club may hold speakers' luncheons where PE/P Program staff could make a presentation about storm water pollution control. Presentations could also be made to environmental groups such as the League of Conservation Voters, Clean Water Action, Citizens for a Better Environment, and Natural Resources Defense Council to educate them about storm water pollution, inform them about the Program's efforts to reduce storm water pollution, and solicit their support for these efforts. Youth groups such as the Scouts are an excellent source of volunteers for activities such as storm drain stenciling, which provides an opportunity to educate young people about storm water pollution and foster a sense of stewardship over the storm drain system through their active participation in the Program's efforts. Information about the importance of storm water pollution control could also be disseminated by preparing articles for inclusion in newsletters produced by community organizations, neighborhood groups, and environmental groups.

Outreach Techniques for Educating the General Public: The PE/P will define an educational approach to target the general public which will be designed to reach the broadest audience possible. Therefore, the message should be communicated in clear, simple English and should introduce the concept of storm water pollution in a problem/solution format. Since many people assume that the storm drain system is connected to wastewater treatment facilities, a key focus of this general education should also be on the storm drain system and its connection to local waterways and the ground water supply. A wide variety of outreach techniques is available to educate the general public about storm water pollution. To select specific outreach techniques, the PE/P Advisory Committee must first prioritize the messages to be communicated--is the

message to educate the public about the fact that the storm drain system is separate from the sanitary sewer system, or is it to communicate "do's and don't's" for households regarding storm water pollution control?

Next, the Advisory Committee will evaluate how the message will be most effectively disseminated to the largest number of people possible given available funds. For example, educating the public about best management practices around the home may be most effectively communicated by collateral materials such as brochures or flyers. Communicating more basic concepts such as the fact that the storm drain system is independent from the sanitary sewer system may be effectively communicated in radio, television, or newspaper advertisements or public service announcements (PSAs). Guidelines defining how materials should be distributed to optimize outreach (i.e., point of purchase, displays at city office counters, direct mail) should be developed by the PE/P Advisory Committee following production of every piece of material developed. The following list provides some examples of the techniques available for outreach to the general public:

- Fact sheet
- Utility bill insert
- Poster contest
- Program kick-off event
- Tax billing information
- Illegal dumping hotline number
- Storm drain stencil/how-to instructions
- Articles for newsletters: Distribute to agencies, businesses, industrial and trade associations, environmental groups, or community organizations which publish newsletters for their employees or members.
- Media campaign: newspaper, television, or radio advertisements; public service announcements (PSAs); cable television programs; press releases; billboards; or bus posters. Consider potential coordination with the City of Los Angeles or other existing storm water pollution control programs.

Professional media or advertising consultant should be retained to design and develop media campaign.

Identify Specific Pollutants to Address: At a workshop held in July 1992, the permittees developed and prioritized a list of pollutants which are perceived to contribute to water quality problems in Riverside County. The following list represents the pollutants which were identified to be of medium or high concern:

- Pesticides, herbicides, fertilizers (medium)
- Oil, grease, and automotive fluids (medium)
- Nutrients and oxygen-demanding substances (medium to high)
- Heavy metals (medium)

The PE/E Advisory Committee should verify that this list is complete and accurate. Pollutant-specific public education should be prioritized according to the pollutants of most concern.

Identify Specific Audiences to Address: Based upon the evaluation of priority pollutants, the PE/P Advisory Committee will evaluate how best to educate the audiences who use, purchase, or dispose of these pollutants about proper management and disposal techniques. In addition, the Advisory Committee will identify other specific audiences where education and participation in storm water pollution reduction efforts would be particularly effective. These priority audiences may include the following:

- Automotive service station operators
- Children
- Neighborhood groups
- Commercial areas/business districts
- Illegal dumpers
- Non-English speakers

- Contractors, engineers, architects, developers, and building department personnel
- Gardeners and personnel responsible for channel maintenance, parks, golf courses, and highway right-of-way

Storm Water Pollution Information Telephone Number: The PE/P Advisory Committee will evaluate the effectiveness identifying a telephone number where the public may obtain information regarding storm water pollution control. All personnel answering this telephone line would be provided with training and written materials, as appropriate, to direct calls to the appropriate staff member or agency. Also, each permittee would develop a written procedure to document calls received. Alternatively, the PE/P Advisory Committee may choose to establish a single, County-wide phone number.

Mailing List: A mailing list will be compiled by the PE/P Advisory Committee to maintain communication between the co-permittees and key contacts regarding storm water pollution control efforts, and to establish a network of contacts for future program coordination. The mailing list will be used as the basis for contact and mailing of printed information as the PE/P program develops. Input to this data base will be provided by each permittee; contacts may include key governmental or agency decision makers, environmental groups, community groups, educational organizations, schools, service organizations, participants at any events held by the permittees regarding storm water pollution control, and other interested parties.

#### **Action 4: Documentation of Outreach Activities**

As stated in the introduction, the public will need a fair amount of time to understand the storm water pollution problem and change their behavior accordingly. As a result, the effectiveness of public education in terms of actually reducing pollutant loads is difficult to measure. However, the PE/P Advisory Committee will develop reporting forms to document public outreach activities, numbers of materials distributed, number of phone calls received, etc. Tables 2 and 3 are examples of the types of reporting forms that could be used. If the Advisory Committee decides to conduct a survey to measure baseline public understanding of storm water pollution, follow-up surveys could be



conducted to measure the change in public perceptions and understanding following implementation of the PE/P Program.

#### **E.4 EXISTING RESOURCES**

##### **Storm Water Management Public Education Programs in California**

**A. City of Los Angeles Storm Water Public Education Program**

Contact: Chuck Ellis, Public Information Director, Storm Water Management Division, (213) 362-5206

This program is currently under development. Maintain communication for future coordination.

**B. Santa Clara Valley Nonpoint Source Pollution Control Program: Public Information/Participation Component**

Contact: Elizabeth Ahrens, Santa Clara Valley Water District, (408) 265-2600  
Materials developed to date include:

General information brochure: "The Bay Begins at Your Front Door" (in English, Spanish, and Vietnamese)

General information poster: "The Bay Begins at Your Front Door"

Integrated pest management brochure: "Pests Bugging You?"

BMP manual and poster for automotive businesses

BMP manual and poster for the construction industry

BMP manual for industry

Educational workbook on water quality for school children

Slide show

Fact sheet introducing the concept of storm water pollution

Fact sheet explaining the sources of storm water pollution

Storm drain stencil and how-to instructions for volunteers

**C. Alameda County Urban Runoff Clean Water Program: Public Information/Participation Component**

Contact: Sharon Gosselin, Alameda County Public Works Agency, (510) 670-6547

Materials developed to date include:

General information brochure (adapted from the Santa Clara Valley Program)

Integrated pest management brochure (developed in conjunction with Santa Clara Valley)

Urban runoff pollution slide show

Educational curricula (K-12)



Storm drain stencil

Training manual for staff answering storm water information telephone line

D. City of Palo Alto

Contact: Phil Bobel, City of Palo Alto Water Quality Control Plant  
(415) 329-2285

Materials developed to date include:

Illegal dumping notification flyer for municipal inspectors

Clean Bay Business sticker award program (also being developed by Santa Clara County Environmental Health Department as part of state-wide grant program)

E. Contra Costa Cities/County/District Storm Water Management Program: Public Education and Industrial Outreach Component

Contact: Henry Tingle, City of Richmond Department of Public Works (510) 620-6538

This program is currently under development; maintain communication for future coordination.

F. Lindsay Museum Statewide Storm Water Management Public Education Program

Contact: Tina Wilson, NPS Project Director, (510) 938-3134

G. Fresno-Clovis Storm Water Management Program: Public Education Program

Contact: Not yet established

This program is currently under development; maintain communication for future coordination.

H. Santa Monica Bay Restoration Program

Contact: Catherine Tyrell (213) 266-7515

I. Center for Marine Conservation:

Contact: Susan Macleod

Materials developed to date include:

"Million Points of Blight" Network: a national storm drain stenciling campaign to control nonpoint source pollution

J. San Bernardino County

Contact: Naresh Varma (714) 387-2102

This program is currently under development; maintain communication for future coordination.

K. Orange County

Contact: Herb Nakasone (714) 834-6192

This program is currently under development; maintain communication for future coordination.

L. San Diego County

Contact: Bob Cain (619) 533-3738

This program is currently under development; maintain communication for future coordination.

M. Los Angeles County

Contact: Rod Kubomoto (818) 458-3537

This program is currently under development; maintain communication for future coordination. See City of Los Angeles

N. City of Los Angeles

Contact: Phil Richardson (213) 362-6346

The city has contracted with a consultant for development of their program.

**Other Related Programs Nationwide**

Connecticut Sea Grant, Hamden, CT  
Chesapeake Bay Foundation--Annapolis, MD; Richmond, VA; Norfolk, VA  
Sarasota County, Sarasota, FL  
Manatee County, Brandenton, FL  
Friends of the Fox River, IL and WI  
Save the Bay, Providence, RI  
Alliance for a Living Ocean, Ship Bottom, NJ  
Clean Ocean Action, Highlands, NJ  
New York Sea Grant, Stony Brook, NY  
Chesapeake Bay Foundation, Harrisburg, PA  
Texas Water Commission, Austin, TX  
City of Bellevue, Bellevue, WA  
Department of Ecology, Olympia, WA  
Household Hazardous Waste Project, Springfield, MO  
Maryland Save Our Streams, Glen Burnie, MD  
Department of Environmental Resources, Landover, MD  
Clinton River Watershed Council, Utica, MI

### **Existing Local Educational Programs**

Riverside County and many of the cities currently conduct a number of public information activities, most of which are associated with recycling or household hazardous waste disposal programs.